

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3575050

|                                                                                                                                                                                                 |                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                   |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                       |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                  |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>            |
| MAKOTO KURIBARA                                                                                                                                                                                 | 10/08/2015                       |
| KATSUHIKO UEKI                                                                                                                                                                                  | 10/08/2015                       |
| YOSHIHISA KOJIMA                                                                                                                                                                                | 10/08/2015                       |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                  |
| <b>Name:</b>                                                                                                                                                                                    | KABUSHIKI KAISHA TOSHIBA         |
| <b>Street Address:</b>                                                                                                                                                                          | 1-1, Shibaura 1-chome, Minato-Ku |
| <b>City:</b>                                                                                                                                                                                    | Tokyo                            |
| <b>State/Country:</b>                                                                                                                                                                           | Japan                            |
| <b>Postal Code:</b>                                                                                                                                                                             | 105-8001                         |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                |                                  |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>                    |
| <b>Application Number:</b>                                                                                                                                                                      | 14850577                         |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                  |
| <b>Fax Number:</b>                                                                                                                                                                              | (703)413-2220                    |
| <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> |                                  |
| <b>Phone:</b>                                                                                                                                                                                   | (703) 413-3000                   |
| <b>Email:</b>                                                                                                                                                                                   | mvukovic@oblon.com               |
| <b>Correspondent Name:</b>                                                                                                                                                                      | OBLON, ET AL.                    |
| <b>Address Line 1:</b>                                                                                                                                                                          | 1940 DUKE STREET                 |
| <b>Address Line 4:</b>                                                                                                                                                                          | ALEXANDRIA, VIRGINIA 22314       |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                  | 460109US20                       |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | MARA VUKOVIC                     |
| <b>SIGNATURE:</b>                                                                                                                                                                               | /Mara Vukovic/                   |
| <b>DATE SIGNED:</b>                                                                                                                                                                             | 10/19/2015                       |
| This document serves as an Oath/Declaration (37 CFR 1.63).                                                                                                                                      |                                  |
| <b>Total Attachments: 3</b>                                                                                                                                                                     |                                  |
| source=460109USASSN#page1.tif                                                                                                                                                                   |                                  |
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| source=460109USASSN#page3.tif                                                                                                                                                                   |                                  |

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE**

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| <b>Title of<br/>Invention</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>MEMORY SYSTEM</b>      |
| <p>As the below named inventor, I hereby declare that:</p> <p>This declaration <input type="checkbox"/> The attached application, or<br/>is directed to: <input checked="" type="checkbox"/> United States application or PCT international application number <u>14/850,577</u><br/>filed on <u>September 10, 2015</u></p> <p>The above-identified application was made or authorized to be made by me.</p> <p>I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.</p> <p>WHEREAS, <u>Kabushiki Kaisha Toshiba</u><br/>(hereinafter referred to as "ASSIGNEE") having places of business at: <u>1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001 Japan</u>, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;</p> <p>NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.</p> <p>I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.</p> <p>Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.</p> <p>I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.</p> |                           |
| <b>LEGAL NAME OF INVENTOR</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                           |
| Inventor: <u>Makoto KURIBARA</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Date: <u>Oct. 8, 2015</u> |
| Signature: <u>Makoto Kuribara</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                           |

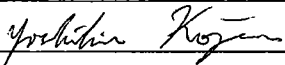
**OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.**  
ATTORNEYS AT LAW  
1940 DUKE STREET  
ALEXANDRIA, VIRGINIA 22314

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
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| <b>LEGAL NAME OF INVENTOR</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      |
| Inventor: <u>Katsuhiko UEKI</u> Date: <u>Oct. 8, 2015</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |
| Signature: <u>Katsuhiko Ueki</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                      |

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| Inventor: <u>Yoshihisa KOJIMA</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Date: <u>Oct - 8, 2015</u> |
| Signature: <u></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |

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