#### 504748314 01/26/2018

### PATENT ASSIGNMENT COVER SHEET

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

#### **CONVEYING PARTY DATA**

| Name              | Execution Date |
|-------------------|----------------|
| TOMONORI UCHIYAMA | 01/18/2018     |
| HIDETAKE HAYASHI  | 01/18/2018     |
| MASAMI HATTORI    | 01/18/2018     |

#### **RECEIVING PARTY DATA**

| Name:           | TOSHIBA LIFESTYLE PRODUCTS & SERVICES CORPORATION |
|-----------------|---------------------------------------------------|
| Street Address: | 25-1, EKIMAE-HONCHO                               |
| City:           | KAWASAKI-SHI, KANAGAWA                            |
| State/Country:  | JAPAN                                             |
| Postal Code:    | 210-8543                                          |

#### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15880646 |

#### **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: mkocijanski@oblon.com

Correspondent Name: OBLON, ET AL.

Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

| ATTORNEY DOCKET NUMBER: | 510587US                                                   |
|-------------------------|------------------------------------------------------------|
| NAME OF SUBMITTER:      | MEGHAN KOCIJANSKI                                          |
| SIGNATURE:              | /Meghan Kocijanski/                                        |
| DATE SIGNED:            | 01/26/2018                                                 |
|                         | This document serves as an Oath/Declaration (37 CFR 1.63). |

#### **Total Attachments: 3**

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PATENT 504748314 REEL: 044735 FRAME: 0516

Attorney Docket Number: 510587US

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

| Title of<br>Invention                                                                                                 | LIQUID ELECTROMAGNETIC VALVE, I<br>LIQUID ELECTROMAGNETIC VALVE, I                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| As the below named                                                                                                    | d inventor, I hereby declare that:                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                 |
| This declaration                                                                                                      | The attached application, or                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                 |
| is directed to:                                                                                                       | United States application or PCT international app<br>filed on <u>July 6, 2016</u>                                                                                                                                                                                                                                                                                                 | plication number PCT/JP2016/070004                                                                                                                                                                                                                              |
| The above-identified                                                                                                  | d application was made or authorized to be made by                                                                                                                                                                                                                                                                                                                                 | / me.                                                                                                                                                                                                                                                           |
| I believe that I am th                                                                                                | he original inventor or an original joint inventor of a                                                                                                                                                                                                                                                                                                                            | a claimed invention in the application.                                                                                                                                                                                                                         |
| (hereinafter referred<br>Kanagawa, 2108543                                                                            | hiba Lifestyle Products & Services Corporation d to as "ASSIGNEE") having places of busines Japan, is desirous of acquiring the entire right, tivatent that may be granted therefore in the United Stries;                                                                                                                                                                         | tle and interest in and to said invention and in                                                                                                                                                                                                                |
| acknowledged, and<br>said ASSIGNEE, the<br>and in all foreign co-<br>other relevant Internal<br>interest in and to an | ORE, in consideration of the sum of FIVE DOLI for other good and valuable consideration, I, by the full and exclusive right to the said invention in the nuntries (including the right to claim priority undernational Treaties and Arrangements from the afores my and all Letters Patent which may be granted the any and all foreign countries and in and to an newals thereof. | nese presents do sell, assign and transfer unto<br>the United States and its territorial possessions<br>the terms of the International Convention and<br>said application) and the entire right, title and<br>therefor in the United States and its territorial |
| any and all foreign<br>assignee of my entir<br>(his) successors and                                                   | te and request the Patent Office Officials in the Uncountries to issue any and all of said Letters Patere right, title and interest in and to the same, for the lassigns, to the full end of the term for which said would have been held by me had this Assignment a                                                                                                              | ent, when granted, to said ASSIGNEE as the<br>e sole use and behoof of said ASSIGNEE, its<br>d Letters Patent may be granted, as fully and                                                                                                                      |
| respecting said invection respecting said invection, substitution, substitution of said Letters Fossible to aid said  | that I will communicate to said ASSIGNEE or its ention, and testify in any legal proceeding, signute, renewal and reissue applications, execute all relation to be issued to said ASSIGNEE, make all ASSIGNEE, its (his) successors and assigns, to ded States and its territorial possessions and in any a                                                                        | n all lawful papers, execute all divisional,<br>necessary assignment papers to cause any and<br>rightful oaths, and, generally do everything<br>obtain and enforce proper protection for said                                                                   |
| by fine or imprisonm                                                                                                  | edge that any willful false statement made in this denent of not more than five (5) years, or both.                                                                                                                                                                                                                                                                                | eclaration is punishable under 18 U.S.C. 1001                                                                                                                                                                                                                   |
| LEGAL NAME OF                                                                                                         | INVENTOR                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                 |
| Inventor: Tomono                                                                                                      | ri UCHIYAMA                                                                                                                                                                                                                                                                                                                                                                        | Date: Jan 18. 2018                                                                                                                                                                                                                                              |
| Signature: Tomor                                                                                                      | nori Uchiyama                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                 |

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P. ATTORNEYS AT LAW

1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 044735 FRAME: 0517

Attorney Docket Number: 510587US

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

| Title of<br>Invention                                                                                              | LIQUID ELECTROMAGNETIC VALVE, A<br>LIQUID ELECTROMAGNETIC VALVE, A                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| As the below name                                                                                                  | d inventor, I hereby declare that:                                                                                                                                                                                                                                                                                                                                                           | ·                                                                                                                                                                                                                                                        |
| This declaration [                                                                                                 | The attached application, or                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                          |
| is directed to:                                                                                                    | United States application or PCT international application July 6, 2016                                                                                                                                                                                                                                                                                                                      | lication number PCT/JP2016/070004                                                                                                                                                                                                                        |
| The above-identifie                                                                                                | d application was made or authorized to be made by                                                                                                                                                                                                                                                                                                                                           | me.                                                                                                                                                                                                                                                      |
| I believe that I am t                                                                                              | he original inventor or an original joint inventor of a                                                                                                                                                                                                                                                                                                                                      | claimed invention in the application.                                                                                                                                                                                                                    |
| (hereinafter referre<br>Kanagawa, 210854)                                                                          | hiba Lifestyle Products & Services Corporation d to as "ASSIGNEE") having places of business 3 Japan, is desirous of acquiring the entire right, titl Patent that may be granted therefore in the United Statries;                                                                                                                                                                           | le and interest in and to said invention and in                                                                                                                                                                                                          |
| acknowledged, and<br>said ASSIGNEE, the<br>and in all foreign co-<br>other relevant Inter-<br>interest in and to a | FORE, in consideration of the sum of FIVE DOLL for other good and valuable consideration, I, by the ne full and exclusive right to the said invention in the puntries (including the right to claim priority under the national Treaties and Arrangements from the aforesany and all Letters Patent which may be granted the any and all foreign countries and in and to any newals thereof. | ese presents do sell, assign and transfer unto<br>e United States and its territorial possessions<br>he terms of the International Convention and<br>aid application) and the entire right, title and<br>erefor in the United States and its territorial |
| any and all foreign<br>assignee of my enti<br>(his) successors and                                                 | ze and request the Patent Office Officials in the Un<br>countries to issue any and all of said Letters Pater<br>re right, title and interest in and to the same, for the<br>d assigns, to the full end of the term for which said<br>would have been held by me had this Assignment an                                                                                                       | nt, when granted, to said ASSIGNEE as the sole use and behoof of said ASSIGNEE, its Letters Patent may be granted, as fully and                                                                                                                          |
| respecting said inv<br>continuation, substi-<br>all of said Letters I<br>possible to aid said                      | that I will communicate to said ASSIGNEE or its rention, and testify in any legal proceeding, sign tute, renewal and reissue applications, execute all ne Patent to be issued to said ASSIGNEE, make all a ASSIGNEE, its (his) successors and assigns, to of ted States and its territorial possessions and in any and                                                                       | all lawful papers, execute all divisional, ecessary assignment papers to cause any and rightful oaths, and, generally do everything btain and enforce proper protection for said                                                                         |
| I hereby acknow<br>by fine or imprisonr                                                                            | ledge that any willful false statement made in this de<br>nent of not more than five (5) years, or both.                                                                                                                                                                                                                                                                                     | claration is punishable under 18 U.S.C. 1001                                                                                                                                                                                                             |
| LEGAL NAME OF                                                                                                      | INVENTOR                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                          |
| Inventor: Hidetake                                                                                                 | e HAYASHI                                                                                                                                                                                                                                                                                                                                                                                    | Date: Jan 18. 2018                                                                                                                                                                                                                                       |
| Signature: Wide                                                                                                    | take Haunshi                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                          |

**OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.**ATTORNEYS AT LAW

1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 044735 FRAME: 0518

Attorney Docket Number: 510587US

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

| Title of<br>Invention                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LIQUID ELECTROMAGNETIC VALVE, METHOD OF MANUFACTURING LIQUID ELECTROMAGNETIC VALVE, AND WASHING MACHINE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| As the below name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ed inventor, I hereby declare that:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -                          |
| This declaration [                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The attached application, or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            |
| is directed to:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | United States application or PCT international application number PCT/JP2016/070004 filed on July 6, 2016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | _                          |
| The above-identifie                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ed application was made or authorized to be made by me.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |
| I believe that I am t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | the original inventor or an original joint inventor of a claimed invention in the application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            |
| (hereinafter referre<br>Kanagawa, 210854)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | thiba Lifestyle Products & Services Corporation and to as "ASSIGNEE") having places of business at: 25-1, Ekimae-honcho, Kawasaki- 3 Japan, is desirous of acquiring the entire right, title and interest in and to said invention and Patent that may be granted therefore in the United States and its territorial possessions and in antries;                                                                                                                                                                                                                                                                                                                                                                   | d in                       |
| acknowledged, and<br>said ASSIGNEE, th<br>and in all foreign co<br>other relevant Inter-<br>interest in and to a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | FORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is here a for other good and valuable consideration, I, by these presents do sell, assign and transfer us the full and exclusive right to the said invention in the United States and its territorial possessiountries (including the right to claim priority under the terms of the International Convention and the afformational Treaties and Arrangements from the aforesaid application) and the entire right, title any and all Letters Patent which may be granted therefor in the United States and its territor any and all foreign countries and in and to any and all divisions, reissues, continuation mewals thereof. | ons<br>and<br>and<br>orial |
| any and all foreign<br>assignee of my enti-<br>(his) successors and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ze and request the Patent Office Officials in the United States and its territorial possessions are countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as irre right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, dissigns, to the full end of the term for which said Letters Patent may be granted, as fully as would have been held by me had this Assignment and sale not been made.                                                                                                                                                                                                                                               | the                        |
| 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. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                            |
| by fine or imprisonn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | rledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 10 ment of not more than five (5) years, or both.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | )01                        |
| LEGAL NAME OF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | INVENTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |
| Inventor: Masami                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | HATTORI Date: 394 18 2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |
| Signature: MAS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | SAMI HATTORI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            |

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 044735 FRAME: 0519

**RECORDED: 01/26/2018**