504534771 09/06/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4581478

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------|----------------|
| TAKUYA GONDOH | 08/04/2017 |
| SHIGERU SUGANO | 08/04/2017 |
| ATSUSHI KURAYAMA | 08/04/2017 |
| MASAMI IWAI | 08/04/2017 |
| ATSUSHI MINOO | 08/04/2017 |

RECEIVING PARTY DATA

| Name: | DAIFUKU CO., LTD. |
|-----------------|---|
| Street Address: | 2-11, MITEJIMA 3-CHOME, NISHIYODOGAWA-KU, OSAKA |
| City: | OSAKA-SHI |
| State/Country: | JAPAN |
| Postal Code: | 5550012 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15696709 |

CORRESPONDENCE DATA

Fax Number: (412)471-4094

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: (412)471-8815

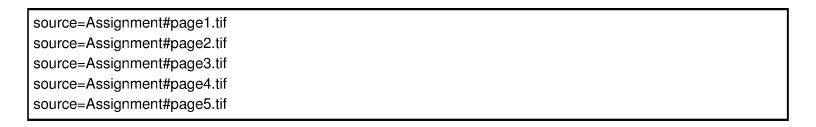
Email: assignments@webblaw.com
Correspondent Name: THE WEBB LAW FIRM
Address Line 1: ONE GATEWAY CENTER

Address Line 2:420 FT. DUQUESNE BLVD., SUITE 1200Address Line 4:PITTSBURGH, PENNSYLVANIA 15222

| ATTORNEY DOCKET NUMBER: | 0388-1707686 | |
|--------------------------------|-------------------------------|--|
| NAME OF SUBMITTER: | MITTER: CHRISTIAN E. SCHUSTER | |
| SIGNATURE: | /Christian E. Schuster/ | |
| DATE SIGNED: 09/06/2017 | | |
| | | |

Total Attachments: 5

PATENT REEL: 043504 FRAME: 0988



PATENT REEL: 043504 FRAME: 0989

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| PATENTS ONLY | | |
| To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below. | | |
| 1. Name of conveying party(ies) Takuya GONDOH Atsushi MINOO Shigeru SUGANO Atsushi KURAYAMA | 2. Name and address of receiving party(ies) Name: Daifuku Co., Ltd. Internal Address: | |
| Masami IWAI Additional name(s) of conveying party(ies) attached? Yes 3. Nature of conveyance/Execution Date(s): Execution Date(s) August 4, 2017 Assignment Merger Security Agreement Change of Name Joint Research Agreement Government Interest Assignment Executive Order 9424, Confirmatory License Other 4. Application or patent number(s): Th A. Patent Application No.(s) 15/696,709 | Street Address: 2-11, Mitejima 3-chome, Nishiyodogawa-ku Osaka City: Osaka-shi State: Country: JAPAN Zip: 5550012 Additional name(s) & address(es) attached? Yes No is document serves as an Oath/Declaration (37 CFR 1.63). B. Patent No.(s) | |
| | attached? ☐ Yes ✓ No | |
| 5. Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: 1 | |
| Name: Christian E. Schuster | 7. Total fee (37 CFR 1.21(h) & 3.41) \$0 | |
| Internal Address: The Webb Law Firm | Authorized to be charged to deposit account | |
| Street Address: <u>One Gateway Center</u> 420 Ft. Duquesne Blvd., Ste 1200 | Enclosed None required (government interest not affecting title) | |
| City: Pittsburgh | 8. Payment Information | |
| State: PA Zip: 15222 | | |
| Phone Number: <u>412-471-8815</u> | | |
| Docket Number: 0388 - 1707686 | Deposit Account Number | |
| Email Address: assignments@webblaw.com | Authorized User Name | |
| 9. Signature: /Christian E. Schu | ster/ September 6, 2017 | |
| Signature | Date | |
| Christian E. Schuster Name of Person Signing Documents to be recorded (including cover sh | Total number of pages including cover sheet, attachments, and documents: eet) should be faxed to (571) 273-0140, or mailed to: | |

PATENT

REEL: 043504 FRAME: 0990

| I | NTERNATIONAL |
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| Application No | - Territoria |
| Attorney Docket No. | 0388-1707686 |

ASSIGNMENT

WHEREAS, as a below named inventor, I have invented certain new and useful improvements in

| useful improvements in |
|---|
| ARTICLE LOADING FACILITY |
| (Invention Title) |
| [X] for which I have this day executed an application for a United States Patent (hereinafter "said application"). |
| AND/OR |
| for which an application for a United States Patent was filed on (mm/dd/yyyy and bears Application Number (hereinafter "said application"). |
| AND/OR |
| for which an international patent application was filed under the Patent Cooperation Treaty on(mm/dd/yyyy), bearing Application No (hereinafter "said application"). |
| AND, WHEREAS, DAIFUKU CO., LTD., a corporation of Osaka, Japan, having a place of business at 2-11, Mitejima 3-chome, Nishiyodogawa-ku, Osaka-shi, Osaka 5550012 Japan, hereinafter called the "assignee", is desirous of acquiring the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed. |
| NOW, THEREFORE, for good and valuable consideration paid to me by said assignee, the receipt of which is hereby acknowledged, I as the inventor or as one of the |

NOW, THEREFORE, for good and valuable consideration paid to me by said assignee, the receipt of which is hereby acknowledged, I as the inventor or as one of the inventors, hereinafter the assignor(s), do hereby assign, sell and transfer unto said assignee the full and exclusive right, title and interest in and to said application and the inventions and improvements therein disclosed for the United States and all foreign countries and any Letters Patent which may issue therefor in the United States and all foreign countries and all divisions, reissues, continuations, continuations-in-part, renewals and/or extensions thereof. Such assignment extends to the full ends of the terms of these applications and patents as fully and entirely as the same would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request any attorney associated with The Webb Law Firm, Customer No. 28289, to insert here in parentheses (Application No. 15/696,709, filed September 6, 2017) the filing date and application number of said application when known.

I covenant that I am the lawful owner(s) of said application, inventions and improvements, that the same are unencumbered, that no license has been granted to make, use or vend the said inventions or improvements or any of them, and that I have the full right to make this Assignment.

And for the consideration aforesaid, I agree individually and, if applicable, jointly that I will communicate to said assignee or the representatives thereof any facts known to me respecting said inventions and improvements, and will, upon request but without expense to me, testify in any legal proceedings, sign all lawful papers, execute all divisional, reissue, continuation, continuation-in-part, renewal and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts deemed necessary or expedient by said assignee or by counsel for said assignee to assist or enable said assignee to obtain and enforce full benefits from the rights and interests herein assigned. This

| | INTERNATIONAL |
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| Applicat | ion No. |
| Attorney | Docket No. <u>0388-1707686</u> |

Assignment shall be binding upon my heirs, executors, administrators and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors and/or assigns, as the case may be, of said assignee.

| FULL NAME OF ASSIGNOR: Takuya GONDOH | RESIDENCE: Minato-ku, Tokyo, Japan |
|---|---------------------------------------|
| EXECUTED this 4th day of August | |
| | Takoya Gon Joh SIGNATURE |
| WITNESS: | |
| 4.22 | |
| | |
| | |
| 2. FULL NAME OF ASSIGNOR: Shigeru SUGANO | RESIDENCE: Gamo-gun, Shiga, Japan |
| | |
| EXECUTED this 4th day of August | Shiperu Sogano |
| | Signature |
| WITNESS: | |
| y.ms | _ |

✓ Checked Box indicates 2 additional page(s) for inventor signatures.

| | Application No. |
|--|---|
| | Attorney Docket No. 0388-1707686 |
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| | |
| 3. FULL NAME OF ASSIGNOR: | RESIDENCE: |
| Atsushi KURAYAMA | Minato-ku, Tokyo, Japan |
| | |
| $EXECUTED$ this $4thday$ of $August_{s}$, | 2017 |
| | Atsush Karayana SIGNATURE |
| | SIGNATURE |
| | , , , , , , , , , , , , , , , , , , , |
| WITNESS: | |
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| | |
| 4. FULL NAME OF ASSIGNOR: | RESIDENCE: |
| Masami IWAI | Minato-ku, Tokyo, Japan |
| | |
| EXECUTED this 4thday of August, | 2017 |
| , | |
| | Masami Iwai |
| | Signature |
| WITNESS: | |
| 4 1222 | |
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| | |

Checked Box indicates __1_ additional page(s) for inventor signatures.

INTERNATIONAL

| | INTERNATIONAL |
|--|----------------------------------|
| | Application NoAttorney Docket No |
| 5. FULL NAME OF ASSIGNOR: Atsushi MINOO | RESIDENCE: |
| Aususii WiiiNOO | Minato-ku, Tokyo, Japan |
| EXECUTED this 4th_day of August | _,2017 |
| | Atsushi Minoo |
| | Signature |
| WITNESS: | |
| (1 1 0 - 2 4 | |