507006750 12/02/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7053587

SUBMISSION TYPE:	RESUBMISSION	
	THE CORRECTION BY DECLARATION OF ERRONEOUS FILED PATENT APPLICATION NO. 16/156,017 RECORDED AT REEL/FRAME NUMBER 051914/0659	
RESUBMIT DOCUMENT ID:	506888676	

CONVEYING PARTY DATA

Name	Execution Date
MITSUBISHI HEAVY INDUSTRIES ENGINEERING, LTD.	09/14/2021

RECEIVING PARTY DATA

Name:	MITSUBISHI HEAVY INDUSTRIES ENGINEERING, LTD.	
Street Address: 3-1, MINATOMIRAI 3-CHOME, NISHI-KU, YOKOHAMA-SHI		
City:	KANAGAWA	
State/Country:	JAPAN	
Postal Code:	220-8401	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16156017

CORRESPONDENCE DATA

Fax Number: (713)228-8778

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: 7132288600

Email: Boden@obwbip.com
Correspondent Name: THOMAS K. SCHERER
Address Line 1: 909 FANNIN STREET

Address Line 2: SUITE 3500

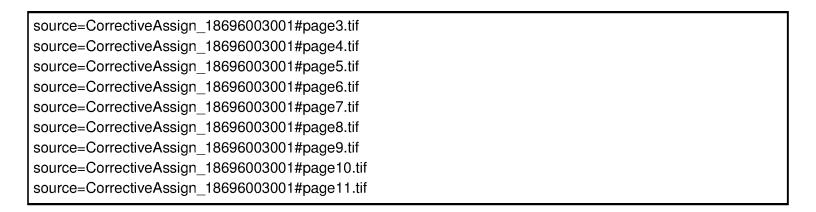
Address Line 4: HOUSTON, TEXAS 77010

ATTORNEY DOCKET NUMBER:	18696-003001
NAME OF SUBMITTER:	THOMAS K. SCHERER
SIGNATURE:	/Thomas K. Scherer/
DATE SIGNED:	12/02/2021

Total Attachments: 11

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PATENT 507006750 REEL: 058276 FRAME: 0195



PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5196198

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
OSAMU MIYAMOTO	08/23/2018
TAKASHI KAMIJO	08/23/2018
TATSUYA TSUJIUCHI	08/23/2018

RECEIVING PARTY DATA

Name:	MITSUBISHI HEAVY INDUSTRIES ENGINEERING, LTD.		
Street Address: 3-1, MINATOMIRAI 3-CHOME, NISHI-KU, YOKOHAMA-SHI			
City:	KANAGAWA		
State/Country:	JAPAN		
Postal Code:	220-8401		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16156017

CORRESPONDENCE DATA

Fax Number: (713)228-8778

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.

73-228-8600 Phone:

Email: Vickers@oshaliang.com YUICHI WATANABE Correspondent Name: Address Line 1: 909 FANNIN ST Address Line 2: **SUITE 3500**

Address Line 4: HOUSTON, TEXAS 77010

ATTORNEY DOCKET NUMBER:	18696/003001
NAME OF SUBMITTER:	YUICHI WATANABE
SIGNATURE:	/Yuichi Watanabe/
DATE SIGNED:	10/17/2018

Total Attachments: 7

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> **PATENT** REEL: 058276 FRAME: 0197

505149431



Docket No.: 18696-003001

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Osamu Miyamoto et al.

Allowed: April 2, 2021

Application No.: 16/156,017

Confirmation No.: 5077

Filed: October 10, 2018

Art Unit: 1776

For: ABSORPTION LIQUID

REGENERATION DEVICE, CO2

RECOVERY DEVICE INCLUDING THE SAME, AND ABSORPTION LIQUID

REGENERATION METHOD

Examiner: C. L. Holecek

DECLARATION TO CORRECT ASSIGNMENT

- I, <u>Takahiro SAITO</u>, am an authorized representative of Mitsubishi Heavy Industries Engineering, Ltd., the original Assignee of the referenced patent application.
- I am at least 21 years of age, I have firsthand knowledge of the facts set forth herein, and I am of sound mind and competent to make this declaration.
- Osamu Miyamoto, Takashi Kamijo, and Tatsuya Tsujiuchi are joint inventors of the referenced patent application.
- 4. On August 23, 2018, the inventors executed an assignment conveying the entire right, title, and interest for the United States of America (including without limitation its territories and possessions) in and to the invention described in the referenced patent application, together with said patent application, all divisions, continuations, continuations-in-part, reissues, and extensions thereof, and all United States Letters Patent which may be granted therefor, to

1

Application No.: 16/156,017 Docket No.: 18696-003001

Mitsubishi Heavy Industries Engineering, Ltd.

5. The original assignment from the inventors of the referenced patent application to Mitsubishi

Heavy Industries Engineering, Ltd. was recorded on October 19, 2018, at Reel 047231, Frame

0898.

6. The assignment records at the United States Patent & Trademark Office ("USPTO") indicate

that the referenced patent application was erroneously assigned from VAP Diagnostics

Laboratory Inc. to Hong Kong Medical Syste, Co., Ltd. on July 25, 2019.

7. The erroneous assignment of the referenced patent application was recorded on February 12,

2020, at Reel 051914, Frame 0659.

8. Mitsubishi Heavy Industries Engineering, Ltd., the original Assignee, has been, and continues

to be, the correct owner of the referenced patent.

9. I, Takahiro SAITO, hereby declare that all statements made herein of my own knowledge are

true; and further that these statements were made with the knowledge that willful false

statements and the like so made are punishable by fine or imprisonment, or both, under Section

1001 of Title 18 of the United States Code, and that such willful false statements may

jeopardize the validity of the application or any patent issued thereon.

Signed this day (4 th, of September 2021.

Takahiro SAITO

Director of Digitalization & Business

Innovation Department

Mitsubishi Heavy Industries Engineering, Ltd.

2

DECLARATION REGARDING VERIFICATION OF TRANSLATION

I, Yuichi Watanabe, at Osha Liang LLP, located at 909 Fannin St., Suite 3500, Houston, TX 77010, hereby declare as follows:

- (1) I am fluent in both Japanese and English languages; and
- (2) To the best of my knowledge and belief, the English language translation of the Japanese language declaration contained within the Declaration form, a copy of which is attached hereto, is a true and correct translation.

By:

Date:

PATENT

REEL: 058276 FRAME: 0201



宣誓書及び譲渡証 - 米国のみ

DECLARATION AND ASSIGNMENT - U.S. RIGHTS ONLY

本証末尾に署名した者(以下、「発明者」という)は次の出願にかかる発明を行った。 Whereas, the undersigned individual(s) (referred to herein as the "INVENTOR(S)") has/have invented:

 米国出願として出願されるか、若しくは PCT 国際出願 The attached application to be filed as a United States application			
** 米国出願、若しくは(日付)に出願されているものであって、次の名称を有するもの。	いた. PC	T 国際出願番号	
 Inited States application or PCT international application numb	er	filed on	

ABSORPTION LIQUID REGENERATION DEVICE, CO₂ RECOVERY DEVICE INCLUDING THE SAME, AND ABSORPTION LIQUID REGENERATION METHOD

その出願に関し、各発明者は次のことを宣言する。

22511

Regarding that application, each of the INVENTOR(S) declares the following:

PATENT TRADEMARK OFFICE

- 上記の出願は私自身、又は私が権限を授与したものによって行われた。
- The above-identified application was made or authorized to be made by me.
- 私は本出願書に記載された本来の発明者、又は本来の共同発明者である。
- I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
- ・ 本宣誓書において故意に虚偽の申し立てを行った場合は 18 U.S.C. 1001 により、劉金あるいは最高五(5)年の禁固刑、あるいはその両方による罰則の対象となることを認める。
- 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.

「発明者」は、適正・相当な対価を受領しており、それが十分な対価であることを認めた上で、

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the INVENTOR(S) hereby assign, transfer, and set over to:

(氏名または組織名)

Mitsubishi Heavy Industries Engineering, Ltd.

having the following address:

(住所)

3-1, Minatomirai 3-Chome, Nishi-ku, Yokohama-shi, Kanagawa 220-8401, Japan

上記の者(以下、「会社」という)、その承継人、及び譲受人に、上記の特許出願に記載された発明(以下、「発明」という)について、同特許出願、その分割、継続、一部継続、再発行、及びそれらの延長、並びに、それらに対して与えられる米国で発行される金ての特許証とともに米国(その領土及び所有地を制限なく含む)における金ての権利、権原、利権を譲渡する。

かかる利権とは、「会社」、その承継人、又はそれらの法的代理人の上記出願に対する。及び、特許証が与えられたときにはそれに対する、本譲渡が行われなかった場合に「発明者」に対して特許証が与えられ、又延長されることにより享受し得るものと同一の期間に互る全ての所有権を意味する。



Intellectual Property Law

(referred to herein as "COMPANY"), its successors, and assigns, the entire right, title, and interest for the United States of America (including without limitation its territories and possessions) in and to the invention described in the patent application identified above (referred to herein as INVENTION), together with said patent application, all divisions, continuations, continuations-in-part, reissues, and extensions thereof, and all United States Letters Patent which may be granted therefor. Such interest represents the entire ownership of said applications and Letters Patent when granted and is to be owned by COMPANY, its successors, and assigns, or their legal representatives, for the full and entire term for which such Letters Patent may be granted or extended, as fully and entirely as the same would have been enjoyed by the INVENTOR(S) if this assignment had not been made.

さらに、「発明者」は以下のことに同意する。 In addition, the undersigned INVENTOR(S) each hereby agrees:

- 1. 米国においてなされた「発明」に対する特許に関する全ての出願との関連において、必要とされ、望ましく、合法で、且つ、適切な書面であって、上記出願、分割、継続、一部継続、これらの補正、これらに関する抵触手続き、又は、「会社」の権利を保護する為に必要な又は望ましいものを含む、全ての書面に、制限なく署名すること。
- 2. To sign and execute any further documents that may be necessary or desirable, lawful, and proper in connection with the prosecution of all applications for patent(s) on the INVENTION in the United States, including without limitation said application and all divisions, continuations, continuations-in-part, amendments thereof, and all interference proceedings associated therewith, or otherwise necessary or desirable to secure the title thereto to COMPANY;
- 2. 全ての書面に署名し、優先権の主張に関連する、又は工業所有権の保護に関する 国際条約若しくはこれに類似の条約或いは協定の下、合法で且つ適切な行為をす スコレ
- To execute all papers and documents and to perform all lawful acts that may be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treaties or agreements;
- 3. 「会社」に対し有効で且つ行使可能な特許が付与される為に必要であると認められる合法 的行為を積極的に行うこと。
- To perform all lawful affirmative acts that may be necessary to obtain the grant of valid and enforceable patents to COMPANY.

「発明者」の各人は、分割、継続、一部継続、又は再発行を含む上記出願に基づく如何なる、そして全ての特許証が「会社」対して発行されるよう。米国特許商標庁長官に権限を認め、要請する。

The undersigned INVENTOR(S) each hereby authorizes and requests the Commissioner of Patents and Trademarks in the United States to issue any and all Letters Patent resulting from said application, including without limitation any division, continuation-in-part, or reissue thereof to COMPANY.

本証末尾に署名した「発明者」は、各々、本証の登記にあたり米国特許商標庁の規則に従い、必要な、又は望ましい識別情報を本譲渡証に挿入する権限をオーシャリャン LLP (OSHA・LIANG LLP) に与える。

The undersigned INVENTOR(S) each hereby grants to the firm of OSHA • LIANG LLP the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

OSHALIANG

Intellectual Property Law

以上の紙として、この翻機配は本紙来風に署名した各人により、各署名の左欄に記された 自に動行された。

IN WIINESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individual's signature:

Aug. 23, 2018 目付 Date	第一発明者の署名 P' Inventor Signature:	Ozam Mizamolo
目付 Date	EAS Print or Type Name:	OTOMAYIM umacO
·	第二発明者の署名 2 nd Inventor Signature;	
目付 Date	氏名。 Print or Type Name:	Taksashi KAMIJO
Aug. 23, 2018 图例 Date	第三発明者の要名 3 nd Inventor Signature: _。	Catana Soyleti
百付 Date	氏係 Print or Type Name:	Tatouya TSUJIUCHI

U. S. Application No.: 16/156,017 Filing Date: October 10, 2018



宣誓書及び譲渡証 - 米国のみ

DECLARATION AND ASSIGNMENT - U.S. RIGHTS ONLY

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 米国出願として出願されるか、若しくは PCT 国際出) The attached application to be filed as a United States applica		tion, or
・ 米国出願、若しくは(日付)に出願さ でいるものであって、次の名称を有するもの。	れた PCT 国際出願番号	
 Inited States application or PCT international application num	berfiled on	

ABSORPTION LIQUID REGENERATION DEVICE, CO₂ RECOVERY DEVICE INCLUDING THE SAME, AND ABSORPTION LIQUID REGENERATION METHOD

その出願に関し、各発明者は次のことを宣言する。

22511

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- The above-identified application was made or authorized to be made by me.
- 私は本出願書に記載された本来の発明者、又は本来の共同発明者である。
- I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
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(氏名または組織名)

Mitsubishi Heavy Industries Engineering, Ltd.

having the following address:

(住所)

3-1, Minatomirai 3-Chome, Nishi-ku, Yokohama-shi, Kanagawa 220-8401, Japan

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- 2. To sign and execute any further documents that may be necessary or desirable, lawful, and proper in connection with the prosecution of all applications for patent(s) on the INVENTION in the United States, including without limitation said application and all divisions, continuations, continuations-in-part, amendments thereof, and all interference proceedings associated therewith, or otherwise necessary or desirable to secure the title thereto to COMPANY;
- 2. 全ての書面に署名し、優先権の主張に関連する、又は工業所有権の保護に関する 国際条約若しくはこれに類似の条約或いは協定の下、合法で且つ適切な行為をす スコレ
- To execute all papers and documents and to perform all lawful acts that may be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treaties or agreements;
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- To perform all lawful affirmative acts that may be necessary to obtain the grant of valid and enforceable patents to COMPANY.

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The undersigned INVENTOR(S) each hereby grants to the firm of OSHA • LIANG LLP the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

OSHALIANG

Intellectual Property Law

以上の証として、この譲渡証は本証末尾に署名した各人により、各署名の左欄に記された 目に執行された。

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individual's rignature:

	第一発明者の署名 1" Inventor Signature:	
目付 Date	氏名	Osamu MIYAMOTO
	Print or Type Name: _	Osanii Wit AMOTO
Aug. 23, 2018	第二発明者の署名 2 nd Inventor Signature:	Takashi Kamijo
国付 Date	氏名 Print or Type Name:	Takashi KAMIJO
	第三発明者の署名 3 rd Inventor Signature:	
日付 Date	氏名 Print or Type Name;	Tatsuya TSUJIUCHI

PATENT REEL: 058276 FRAME: 0207

RECORDED: 09/28/2028