

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5524535

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
RYO TAKATA	01/24/2019
MITSUYOSHI TSUCHIYA	01/24/2019
YASUHIRO SASAO	01/24/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	mitsubishi hitachi power systems, ltd.
<b>Street Address:</b>	3-1, MINATOMIRAI 3-CHOME, NISHI-KU
<b>City:</b>	YOKOHAMA-SHI, KANAGAWA
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	220-8401
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16461148
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(571)395-8753
<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) 827-3800
<b>Email:</b>	patentmail@whda.com
<b>Correspondent Name:</b>	WESTERMAN, HATTORI, DANIELS & ADRIAN, LL
<b>Address Line 1:</b>	8500 LEESBURG PIKE
<b>Address Line 2:</b>	SUITE 7500
<b>Address Line 4:</b>	TYSONS, VIRGINIA 22182
<b>ATTORNEY DOCKET NUMBER:</b>	P190496US00
<b>NAME OF SUBMITTER:</b>	YOLIDIA A. PASOS
<b>SIGNATURE:</b>	/YOLIDIA A. PASOS/
<b>DATE SIGNED:</b>	05/15/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).
<b>Total Attachments: 4</b>	
source=P190496US00_Combined Declaration and Assignment_05-15-2019#page1.tif	
source=P190496US00_Combined Declaration and Assignment_05-15-2019#page2.tif	

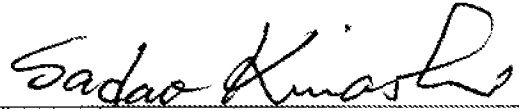
source=P190496US00\_Combined Declaration and Assignment\_05-15-2019#page3.tif

source=P190496US00\_Combined Declaration and Assignment\_05-15-2019#page4.tif

VERIFICATION OF TRANSLATION

I, SADAO KINASHI, do hereby declare that I am knowledgeable in the English language and in Japanese language, and that I believe the English language in the foregoing Declaration is a full and faithful translation of the Japanese language of the documents. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be 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, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signature of verifier:



Name of verifier:

Mr. Sadao Kinashi

Post office address of verifier:

8500 Leesburg Pike SUITE 7500  
Tysons, VA 22182

Date of signature:

October 24, 2017

**Combined Declaration and Assignment  
for Utility Patent and Design Patent Applications**  
 特許及びデザイン特許出願用の譲渡書付き宣言書  
 Japanese Language Declaration and Assignment  
 日本語譲渡書付き宣言書

**DECLARATION  
宣言書**

私は、以下に記名された発明者として、ここに下記の通り宣言する：

As a below named inventor, I hereby declare that:

私は、下記の名称の発明について、特許請求範囲に記載され、且つ特許が求められている発明主題の真の発明者であるか、或いは真の共同発明者であると信じている。

I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

発明の名称を英語で記入：

Insert Title:

STEAM TURBINE
---------------

上記発明の出願（明細書及び図面）は下記の欄がチェックされている場合を除き、ここに添付されている

the application of which is attached hereto unless the following is checked

\_\_\_\_\_日に米国出願番号 \_\_\_\_\_として出願され、そして \_\_\_\_\_日に PCT 国際出願番号 \_\_\_\_\_として出願され且つ \_\_\_\_\_日に補正された出願（補正があった場合）

was filed on \_\_\_\_\_ as United States Application Number \_\_\_\_\_ and was filed on **January 17, 2018** as PCT International Application Number **PCT/JP2018/001092** and was amended on \_\_\_\_\_ (if applicable).

上記出願は、私が作成したものか、あるいは私がその作成を認めたものである。

The above-identified application was made or authorized to be made by me.

私は、この宣言書において故意に偽りを述べた場合、合衆国法典第 18 巻第 1001 条に基づき、罰金あるいは 5 年以下の懲役、または両方の懲罰が課され得ることを認識している。

I hereby acknowledge that any willful false statement made in this declaration is punishable under section 1001 of title 18 by fine or imprisonment of not more than 5 years, or both.

### ASSIGNMENT 譲渡書

下記の者（以下、譲受人）によって提供され、そしてその適切性と受領は下記に署名した発明者（達）（以下、譲渡人）によって承認された。適正で価値のある対価をもって、

FOR GOOD AND VALUABLE CONSIDERATION, the adequacy and receipt of which is hereby acknowledged by the undersigned inventor(s) (hereinafter ASSIGNOR) by

譲受人名/住所:

Insert Assignee(s) Name/Address:

Mitsubishi Hitachi Power Systems, Ltd.  
3-1, Minatomirai 3-Chome, Nishi-ku, Yokohama-shi, Kanagawa 220-8401 Japan

ここに、下記に署名をした譲渡人は、上記出願（例、仮出願又は通常の出願）の全ての且つ排他的な権利、権限、利権を譲受人に売却・譲渡・移転し、上記出願或いはその継続、分割、代替、再発行、再審査、補足審査、当事者系レビュー、登録後レビュー、その他の手続によって得られる全ての米国特許をその全期間又は許可された期間をもって譲渡する。

(hereinafter ASSIGNEE), the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the above-identified application (e.g., provisional or non-provisional) and all Letters Patent of the United States to be obtained therefore on said application or any continuation, divisional, substitute, reissue, reexamination, supplemental examination, inter partes review, post grant review, or other procedures thereof for the full term or terms for which the same may be granted.

譲渡人は、上記出願及びその継続、分割、再発行、再審査出願、補足審査、当事者系レビュー、登録後レビュー、その他の手続に係わる全ての必要書類を作成する事に同意し、譲受人が必要または便宜的であると考えるような、出願に係わる別の譲渡書を作成する事にも同意する。

The ASSIGNOR agrees to execute all papers necessary in connection with the application and any continuation, divisional, reissue, reexamination, supplemental examination, inter partes review, post grant review, or other procedures thereof and also to execute separate assignments in connection with such applications as the ASSIGNEE may deem necessary or expedient.

譲渡人は、この出願或いはその継続、分割、再発行、再審査出願、補足審査、当事者系レビュー、登録後レビュー、その他の手続に関して提起され得るインターフェアランス、訴訟、あるいは他の法的な処置、そして特許や再発行特許に係わる全ての必要な書類を作成する事に同意し、証拠の取得や提出及びインターフェアランス、訴訟、あるいはその他の法的手続において、譲受人に可能なあらゆる方法で協力することに同意する。

The ASSIGNOR agrees to execute all papers necessary in connection with any interference, litigation, or other legal proceeding which may be declared concerning this application or any continuation, divisional, reissue or reexamination, supplemental examination, inter partes review, post grant review, or other procedures thereof or Letters Patent or reissue patent issued thereon and to cooperate with the ASSIGNEE in every way possible in obtaining and producing evidence and proceeding with such interference, litigation, or other legal proceeding.

譲渡人は、合衆国及び合衆国以外の外国の全ての国において開示されている出願及び発明の全ての且つ排他的な権利及び権限及び利権を、譲受人に売却・譲渡・移転し、譲受人の名前でそのような手続を適切な国々へ特許出願する事を譲受人に認め、国際条約の基で優先権を主張する事を認め、当該特許の出願及び継続、分割、代替、再発行または再審査、補足審査、当事者系レビュー、登録後レビュー、その他の手続に係わる全ての必要書類を作成すること及び、譲受人が必要または便宜的であると考え場合は、当該出願に係わる別の譲渡書を作成する事に同意する。

The ASSIGNOR sells, assigns and transfers to said ASSIGNEE the entire and exclusive right, title and interest to the application(s) and the invention(s) disclosed therein for the United States of America and all countries foreign to the United States and do hereby authorize said ASSIGNEE to apply for patents therefore in its own name in countries where such procedure is proper and to claim the priority right under the International Convention and agrees to execute all papers necessary in connection with applications for such patents and any continuation, divisional, substitute, reissue or reexamination applications, supplemental examination, inter partes review, post grant review, or other procedures thereof and also execute separate assignments in connection with such applications as the ASSIGNEE may deem necessary or expedient.

ここに、下記の署名者により、その名の横に記載された日に署名された：

Hereby executed by the undersigned on the date opposite the undersigned name:

発明者の正式な氏名

Legal Name of Inventor:

Ryo TAKATA

発明者の署名

日付

Signature

Date

*Ryo Takata*

January 24, 2019

発明者の正式な氏名

Legal Name of Inventor:

Mitsuyoshi TSUCHIYA

発明者の署名

日付

Signature

Date

*M. Tsuchiya*

January 24, 2019

発明者の正式な氏名

Legal Name of Inventor:

Yasuhiro SASAO

発明者の署名

日付

Signature

Date

*Yasuhiro Sasao*

January 24, 2019

注：本書面に必要な情報やサインは英語右欄のみに記入。日本語左欄は英語原本理解のための参考情報。