08/22/2018 505058303

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5105058

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the SECOND ASSIGNEE'S NAME previously recorded on Reel 040346 Frame 0692. Assignor(s) hereby confirms the SECOND ASSIGNEE'S NAME IS IHI MACHINERY AND FURNACE CO., LTD

## **CONVEYING PARTY DATA**

Name	Execution Date
KAZUHIKO KATSUMATA	11/09/2016
MASATOSHI MITSUZUKA	11/09/2016
OSAMU SAKAMOTO	11/09/2016
TAKAHIRO NAGATA	11/09/2016

## **RECEIVING PARTY DATA**

Name:	IHI CORPORATION
Street Address:	1-1, TOYOSU 3-CHOME, KOTO-KU
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State/Country:	JAPAN
Postal Code:	135-8710
Name:	IHI MACHINERY AND FURNACE CO., LTD.
Name: Street Address:	IHI MACHINERY AND FURNACE CO., LTD.  12-32, KONAN 2-CHOME, MINATO-KU
	·
Street Address:	12-32, KONAN 2-CHOME, MINATO-KU

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15353284

## CORRESPONDENCE DATA

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

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REEL: 046914 FRAME: 0088 505058303

PATENT

ATTORNEY DOCKET NUMBER:	4371-0160US
NAME OF SUBMITTER:	STEVEN P. WEIHROUCH
SIGNATURE:	/Steven P. Weihrouch/
DATE SIGNED:	08/22/2018
Total Attachments: 5	

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> PATENT REEL: 046914 FRAME: 0089

## 504099203 11/16/2016

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4145872

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
KAZUHIKO KATSUMATA	11/09/2016
MASATOSHI MITSUZUKA	11/09/2016
OSAMU SAKAMOTO	11/09/2016
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City:	TOKYO
State/Country:	JAPAN
Postal Code:	108-0075

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

Property Type	Number
Application Number:	15353284

#### **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER: 4371-0160

PATENT REEL: 046914 FRAME: 0090 Rothwell, Figg, Ernst & Manbeck, P.C.

Attorney Docket No.

## ASSIGNMENT BY INVENTOR(S) OF PATENT APPLICATION FOR ALL COUNTRIES

BE IT KNOWN THAT, for good and valuable consideration paid to the undersigned inventor(s) (hereinafter ASSIGNOR(S)) by

Name: (1) IHI Corporation

(2) IHI Machinery and Furnace Co., Ltd.

Address at (1) 1-1, Toyosu 3-chome, Koto-ku, Tokyo 135-8710 Japan

(2) 12-32, Konan 2-chome, Minato-ku, Tokyo 108-0075 Japan

(hereinafter ASSIGNEE),

the receipt and adequacy of which is hereby acknowledged, ASSIGNOR(s) hereby sell(s), assign(s) and transfer(s) to ASSIGNEE

all of his/her right, title and interest in, to and under the invention and application entitled:

CLEANING APPARATUS

for which application for Letters Patent of the United States ASSIGNOR(S) is/are the sole or a joint inventor and which application was executed on even date herewith or is identified as follows

U.S. Serial No. or PCT Appln. No.: PCT/JP2015/064751 Filing Date: May 22, 2015

(Rothwell, Figg, Ernst & Manbeck is hereby authorized to insert the series code, serial or application number and/or filing date hereon, when known)

and all Letters Patent of the United States to be obtained on said application or on any continuation, division, reissue, reexamination or extension thereof and all rights connected therewith, and all applications for Letters Patent which may hereafter be filed for said invention in any country or countries foreign to the United States, and all Letters Patent which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of the said application for Letters Patent of the United States which are created by any law, treaty or international convention, for the full term or terms for which the same may be granted, including all rights to recover damages for any and all past infringement; and

ASSIGNOR(S) agree(s) to execute all papers necessary in connection with said application and any continuing, divisional, reissue or reexamination applications thereof and to execute separate assignments in connection with such applications as ASSIGNEE may deem necessary.

ASSIGNOR(S) agree(s) 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, division, reissue or reexamination thereof or Letters Patent, reissue patent or reexamination certificate issued thereon and to cooperate with ASSIGNEE in every way possible in obtaining and producing evidence and proceeding with such interference, litigation, or other legal proceeding.

ASSIGNOR(S) covenant(s) that he/she has the full right to convey the entire interest herein assigned and has not executed, and will not execute, any agreement in conflict herewith.

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Attorney Docket No.

ASSIGNOR(S) acknowledge(s) that ASSIGNEE may appoint any attorney or practitioner of ASSIGNEE'S choice to prosecute any application or other legal proceeding involving said invention and ASSIGNOR(S) further acknowledge(s) that any attorney or practitioner so appointed by ASSIGNEE does not represent ASSIGNOR(S) and that such appointment by ASSIGNEE does not create any attorney-client relationship between ASSIGNOR(S) and any attorney or practitioner appointed by ASSIGNEE.

IN WITNESS WHEREOF, ASSIGNOR(S) has/ have affixed his/her signature below.

Signature: Kazuhiko KATSUMATA	Date!November 9, 2016
Typed Name: Kazuhiko KATSUMATA	
Signature: Masaloshi Mitsuzuka	Date. November 9, 2016
Typed Name: Masatoshi MITSUZUKA	
Signature: Dsamu Sakamoto	DateNovember 9, 2016
Typed Name: Osamu SAKAMOTO	
Signature: Takahiro Nagata Typed Name: Takahiro NAGATA	Date November 9, 2016

NO LEGALIZATION REQUIRED. THIS DOCUMENT MAY BE NOTARIZED IF DESIRED FOR FURTHER PROOF OF EXECUTION.

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PATENT REEL: 046914 FRAME: 0092

**RECORDED: 08/22/2018**