PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4949036

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAMIO IKEHASHI	04/02/2018
HIROAKI YAMAZAKI	03/27/2018

RECEIVING PARTY DATA

Name:	KABUSHIKI KAISHA TOSHIBA
Street Address:	1-1, SHIBAURA 1-CHOME, MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	105-8001

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15914828

CORRESPONDENCE DATA

Fax Number:

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.

Email: anita.nylander@finnegan.com Correspondent Name: FINNEGAN, HENDERSON Address Line 1: 901 NEW YORK AVENUE, NW Address Line 4: WASHINGTON, D.C. 20001

ATTORNEY DOCKET NUMBER:	12389.0151
NAME OF SUBMITTER:	ANITA L. NYLANDER
SIGNATURE:	/Anita L. Nylander/
DATE SIGNED:	05/07/2018

Total Attachments: 2 source=asgt#page1.tif source=asgt#page2.tif

> **PATENT** REEL: 045731 FRAME: 0747

504902292

In consideration of value received, I, having a residence as stated below above my name, the sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are listed below) of an invention described in an application for United States patent entitled:

GAS SENSOR AND MANUFACTURING METHOD OF THE SAME

have sold and assigned and do hereby sell and assign to KABUSHIKI KAISHA TOSHIBA a Japanese corporation, having a business address at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan

its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention as disclosed, shown and described in said United States patent application:

(check one)	[]	executed concurrently herewith			
	LJ	executed on	•		
	[x j	Application No. 15/914,828	, filed	March 7, 2018	

and in and to all applications for patent and patents for invention including all divisions, reissues, continuations, substitutes and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property, including rights of priority, resulting from the filing of any of said applications; and I authorize and request any official whose duty is to issue patents, to issue any patent on said invention or resulting therefrom to said Assignee, and I agree that on request and without further consideration, but at the expense of said Assignee, I will communicate to said Assignee or its representatives all facts known to me respecting said invention and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing, continued prosecution, reissue, or other applications, make all rightful oaths and declarations, and generally do everything possible to aid said Assignee to obtain and enforce proper patent protection for said invention.

I hereby grant the following law firm the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the Rules of the U.S. Patent and Trademark Office for recordation of this document.

Finnegan, Henderson, Farabow Garrett & Dunner, L.L.P., 901 New York Avenue, N.W. Washington, D.C. 20001-4413

1048000669

PATENT REEL: 045731 FRAME: 0748

ASSIGNMENT

13G10004637-US-A (17S0390-1)

[1st Inventor]
Residence Address: Yokohama Kanagawa Japan
Mailing Address: c/o IP Div. Toshiba Corp. (K. K. TOSHIBA), 1-1, Shibaura 1-chome, Minato-ku, Tokyo
105-8001, Japan
Citizenship: Japan

Tamio Ikehashi

[2nd Inventor]
Residence Address: Yokohama Kanagawa Japan
Mailing Address: c/o IP Div. Toshiba Corp. (K. K. TOSHIBA), 1-1, Shibaura 1-chome, Minato-ku, Tokyo
105-8001, Japan
Citizenship: Japan

March 27th, 2018

Hipolit Vanashi

1048000669

PATENT REEL: 045731 FRAME: 0749

RECORDED: 05/07/2018