PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6881315

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAKAYUKI HOSHI	01/22/2020
MASANOBU HONDA	01/22/2020
MASAHIRO TABATA	01/26/2020
TORU HISAMATSU	01/08/2020

RECEIVING PARTY DATA

Name:	TOKYO ELECTRON LIMITED	
Street Address:	3-1 AKASAKA 5-CHOME, MINATO-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	107-6325	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17409645

CORRESPONDENCE DATA

Fax Number: (202)783-6031

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: 2027836040

Email: gcastell@rfem.com

Correspondent Name: ROTHWELL, FIGG, ERNST & MANBECK, P.C.

Address Line 1: 607 14TH STREET, N.W.

Address Line 2: SUITE 800

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	4030-0934	
NAME OF SUBMITTER:	STEVEN P. WEIHROUCH, REG#32829	
SIGNATURE:	/Steven P. Weihrouch/	
DATE SIGNED: 08/24/2021		
	This document serves as an Oath/Declaration (37 CFR 1.63).	
T	•	

Total Attachments: 3

PATENT REEL: 057276 FRAME: 0082

506834495

source=4030-0934_Assignment#page1.tif source=4030-0934_Assignment#page2.tif source=4030-0934_Assignment#page3.tif

> PATENT REEL: 057276 FRAME: 0083

DECLARATION AND ASSIGNMENT

Title of Invention: FILM ETCHING METHOD FOR ETCHING FILM

As a below named inventor, I hereby declare that:
This declaration is directed to:
[X] the attached application (Attorney Docket Number), or
[] United States application or PCT international application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
I have reviewed and understand the contents of the application, including the claims.
I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.
Whereas, each undersigned inventor has made certain inventions, improvements, and

discoveries (herein referred to as the "INVENTION") disclosed in the above-identified patent application (herein referred to as the ("APPLICATION");

Whereas, TOKYO ELECTRON LIMITED, a corporation of Japan having a place of business at 3-1 Akasaka 5-chome, Minato-ku, Tokyo 107-6325, Japan (herein referred to as "ASSIGNEE"), desires to acquire, and each undersigned inventor desires to grant to ASSIGNEE, the entire worldwide right, title, and interest in and to the INVENTION and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor (herein referred to ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the INVENTION, to ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned

had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and all related patents and applications, in ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by ASSIGNEE, its successors, legal representatives, and assigns.

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.

Legal Name of Inventor: Takayuki HOSHI	
Signature: Takayaki Hoshi	Date: <u>Joh. 22, 2020</u>
Legal Name of Inventor: Masanobu HONDA	
Signature: Mc, sanobu Honda	Date: Jan, 22, 2020
Legal Name of Inventor: Masahiro TABATA	
Signature:	Date:
Legal Name of Inventor: Toru HISAMATSU	
Signature: Toru Hisamatsu	Date: Tan. 8, 2020

had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and all related patents and applications, in ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by ASSIGNEE, its successors, legal representatives, and assigns.

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.

Legal Name of I	inventor: Takayuki HOSHI	
Signature:		Date:
Legal Name of I	Inventor: Masanobu HONDA	
Signature:		Date:
Legal Name of I	Inventor: Masahiro TABATA	
Signature:	Masahiro Tabata	Date: Jan 26, 2020
Legal Name of I	Inventor: Toru HISAMATSU	
Signature:		Date: