506985247 11/18/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT7032086

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JUNITSU YAMAKAWA	10/29/2020
CHUNHUI DOU	02/11/2021
RISA KIMURA	10/22/2020
TOSHIO YOKOYAMA	10/21/2020

RECEIVING PARTY DATA

Name:	EBARA CORPORATION	
Street Address:	11-1, HANEDA ASAHI-CHO, OTA-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	1448510	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17529769

CORRESPONDENCE DATA

Fax Number: (206)624-7317

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: 2063321380

Email: assignments@bakerlaw.com

Correspondent Name: BAKERHOSTETLER Address Line 1: 999 THIRD AVENUE

Address Line 2: **SUITE 3900**

Address Line 4: SEATTLE, WASHINGTON 98104-4040

ATTORNEY DOCKET NUMBER:	101716.000253
NAME OF SUBMITTER:	BARTH ZURKAMMER
SIGNATURE:	/Barth Zurkammer/
DATE SIGNED:	11/18/2021
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7

PATENT REEL: 058153 FRAME: 0088

506985247

source=101716_000253_CombinedDeclarationAssignment-SubstituteStatement-Dou-Parent#page1.tif source=101716_000253_CombinedDeclarationAssignment-SubstituteStatement-Dou-Parent#page2.tif source=101716_000253_CombinedDeclarationAssignment-SubstituteStatement-Dou-Parent#page3.tif source=101716_000253_CombinedDeclarationAssignment-SubstituteStatement-Dou-Parent#page4.tif source=101716_000253_CombinedDeclarationAssignment-SubstituteStatement-Dou-Parent#page5.tif source=101716_000253_CombinedDeclarationAssignment-SubstituteStatement-Dou-Parent#page6.tif source=101716_000253_CombinedDeclarationAssignment-SubstituteStatement-Dou-Parent#page7.tif

PATENT REEL: 058153 FRAME: 0089

Docket No.: 101716.000237

COMBINED DECLARATION AND ASSIGNMENT

ASSIGNMENT

Assignor(s)

NAME Junitsu YAMAKAWA

Address c/o Ebara Corporation, 11-1, Haneda Asahi-cho, Ota-ku, Tokyo 1448510 Japan

NAME Chunhui DOU

Address c/o Ebara Corporation, 11-1, Haneda Asahi-cho, Ota-ku, Tokyo 1448510 Japan

NAME Risa KIMURA

Address c/o Ebara Corporation, 11-1, Haneda Asahi-cho, Ota-ku, Tokyo 1448510 Japan

NAME Toshio YOKOYAMA

Address c/o Ebara Corporation, 11-1, Haneda Asahi-cho, Ota-ku, Tokyo 1448510 Japan

WHEREAS, ASSIGNOR(S) (listed above), are inventor(s) of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number ("the invention"), which is entitled

COPPER OXIDE SOLID USED FOR PLATING SUBSTRATE, METHOD FOR PRODUCING COPPER OXIDE SOLID, AND DEVICE FOR SUPPLYING PLATING SOLUTION TO PLATING BATH

("the subject application"), and which claims priority to patent application number **Japanese Patent Application No. 2018-155392** filed **August 22, 2018** ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **EBARA CORPORATION**, ASSIGNEE, having a place of business at **11-1**, **HANEDA ASAHI-CHO**, **OTA-KU**, **TOKYO 1448510 JAPAN**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR(S), hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose,

Docket No.: 101716.000237

COMBINED DECLARATION AND ASSIGNMENT

describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND ASSIGNOR(S) HEREBY covenant and agree that ASSIGNOR(S) have full right to convey the entire interest herein assigned, and that ASSIGNOR(S) have not executed, and will not execute, any agreement in conflict herewith.

AND ASSIGNOR(S) HEREBY further covenant and agree that ASSIGNOR(S) will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to ASSIGNOR(S) respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

Docket No.: 101716.000237

COMBINED DECLARATION AND ASSIGNMENT

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	COPPER OXIDE SOLID USED FOR PLATING SUBSTRATE, METHOD FOR PRODUCING COPPER OXIDE SOLID, AND
	DEVICE FOR SUPPLYING PLATING SOLUTION TO PLATING BATH

As the below named inventor(s), I/we declare that:

This combined declaration and assignment is directed to:

the attached application, or
☑ United States application or PCT international application number PCT/JP2019/029751 filed
on July 30, 2019

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 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.

Notice to Inventor(s): A person may not execute this declaration unless that person has reviewed and understands the contents of the above-identified application, including the claims.

Notice to Inventor(s): A person may not execute this declaration unless that person is aware of the duty to disclose to the US Patent and Trademark Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

Docket No.: 101716.000237

COMBINED DECLARATION AND ASSIGNMENT

Junitsu YAMAKAWA Printed Name in English

Inventor's Signature

29, act / 2020

Date

Chunhui DOU

Printed Name in English

Inventor's Signature

Date

Risa KIMURA

Printed Name in English

Klaa Kimura

Inventor's Signature

Oct. 22/2020

Date

Toshio YOKOYAMA

Printed Name in English

Inventor's Signature

٠, , ,

Date

The foregoing Combined Declaration and Assignment covers patent application number 17/268,036,

filed on February 11, 2021.

/Michael J. Swope/

Name of Attorney: Michael J. Swope

Registration No.: 38,041

Date of Insertion: February 11, 2021

Page 4 of 4

Document Description: Oath or declaration filed

PTO/AIA/02 (07-13) Approved for use through 11/30/2020. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	COPPER OXIDE SOLID USED COPPER OXIDE SOLID, AND BATH			
This stateme	nt is directed to:			
The atta	ached application,			
OR				
United \$	States application or PCT international	application number PCT/	JP2019/029751 filed	on July 30, 2019
LEGAL NA	ME of inventor to whom this su	bstitute statement appl	ies:	
(E.g., Given	Name (first and middle (if any)) and F	amily Name or Surname)		
Chunhui D	OU			
Residence (except for a deceased or legally incap	acitated inventor):	T	
City Toky (State	_{Country} Japan	
	ss (except for a deceased or legally incapa			
c/o Ebara	Corporation, 11-1, Haneda Asal	ni-cho, Ota-ku, Tokyo 14	148510 Japan	
_{City} Toky	<u> </u>	State	_{Zip} 1448510	_{Country} Japan
I believe the in the ap	above-named inventor or joint inventolication.	or to be the original inventor	r or an original joint inve	ntor of a claimed invention
The above-i	dentified application was made or autl	norized to be made by me.		
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.				
Relationshi	p to the inventor to whom this substitu	ite statement applies:		
Le	gal Representative (for deceased or I	egally incapacitated invento	or only),	
As	ssignee,			
Person to whom the inventor is under an obligation to assign,				
Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or				
Jo	int Inventor.			

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

REEL: 058153 FRAME: 0094

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:		
Inventor is deceased,		
Inventor is under legal incapacity,		
Inventor cannot be found or reached after diligent effort, or		
Inventor has refused to execute the oath or declaration under 37 CFR 1.63.		
If there are joint inventors, please check the appropriate box below:		
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equior is currently submitted.	valent) naming the entire inventive entity has been	
OR		
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equi Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming information is attached. See 37 CFR 1.64(b).	valent) has not been submitted. Thus, a Substitute the entire inventive entity and providing inventor	
WARNING:		
Petitioner/applicant is cautioned to avoid submitting personal information in decontribute to identity theft. Personal information such as social security numb (other than a check or credit card authorization form PTO-2038 submitted for to support a petition or an application. If this type of personal information is in petitioners/applicants should consider redacting such personal information fro USPTO. Petitioner/applicant is advised that the record of a patent application application (unless a non-publication request in compliance with 37 CFR 1.21 patent. Furthermore, the record from an abandoned application may also be referenced in a published application or an issued patent (see 37 CFR 1.14). PTO-2038 submitted for payment purposes are not retained in the application	ers, bank account numbers, or credit card numbers bayment purposes) is never required by the USPTO cluded in documents submitted to the USPTO, in the documents before submitting them to the is available to the public after publication of the account of the application of the available to the public if the application is Checks and credit card authorization forms	
PERSON EXECUTING THIS SUBSTITUTE STATEMENT:		
Name: Akio TERAGAKI	Date (Optional):	
Signature:		
APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE If the applicant is a juristic entity, list the applicant name and the title of the significant process.	TE STATEMENT:	
	nor:	
	ner:	
Applicant Name:	ner:	
Applicant Name: Ebara Corporation Title of Person Executing	ner:	
Applicant Name: Ebara Corporation		
Applicant Name: Ebara Corporation Title of Person Executing This Substitute Statement: Division Executive, Intellectual Property Division	applicant.	
Applicant Name: Title of Person Executing This Substitute Statement: Division Executive, Intellectual Property Division The signer, whose title is supplied above, is authorized to act on behalf of the Residence of the signer (unless provided in an application data sheet, P	applicant.	
Applicant Name: Title of Person Executing This Substitute Statement: Division Executive, Intellectual Property Division The signer, whose title is supplied above, is authorized to act on behalf of the Residence of the signer (unless provided in an application data sheet, P	applicant. TO/AIA/14 or equivalent): Country Japan	
Applicant Name: Title of Person Executing This Substitute Statement: Division Executive, Intellectual Property Division The signer, whose title is supplied above, is authorized to act on behalf of the Residence of the signer (unless provided in an application data sheet, P City Tokyo State	applicant. TO/AIA/14 or equivalent): Country Japan eet, PTO/AIA/14 or equivalent)	
Applicant Name: Title of Person Executing This Substitute Statement: Division Executive, Intellectual Property Division The signer, whose title is supplied above, is authorized to act on behalf of the Residence of the signer (unless provided in an application data sheet, P City Tokyo State Mailing Address of the signer (unless provided in an application data sheet)	applicant. TO/AIA/14 or equivalent): Country Japan eet, PTO/AIA/14 or equivalent) 48510 Japan	
Applicant Name: Ebara Corporation Title of Person Executing This Substitute Statement: Division Executive, Intellectual Property Division The signer, whose title is supplied above, is authorized to act on behalf of the Residence of the signer (unless provided in an application data sheet, P City Tokyo State Mailing Address of the signer (unless provided in an application data sheet, P) C/O Ebara Corporation, 11-1, Haneda Asahi-cho, Ota-ku, Tokyo 14 City Tokyo State	applicant. TO/AIA/14 or equivalent): Country Japan eet, PTO/AIA/14 or equivalent) 48510 Japan Zip 1448510 Country Japan	
Applicant Name: Ebara Corporation Title of Person Executing This Substitute Statement: Division Executive, Intellectual Property Division The signer, whose title is supplied above, is authorized to act on behalf of the Residence of the signer (unless provided in an application data sheet, P City Tokyo State Mailing Address of the signer (unless provided in an application data sheet, P) C/O Ebara Corporation, 11-1, Haneda Asahi-cho, Ota-ku, Tokyo 14	applicant. TO/AIA/14 or equivalent): Country Japan eet, PTO/AIA/14 or equivalent) 48510 Japan Zip 1448510 Country Japan Country Japan legally incapacitated, cannot be found or reached	

[Page 2 of 2]

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PATENT REEL: 058153 FRAME: 0096

RECORDED: 11/18/2021