PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 **EPAS ID: PAT7272747**

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JIE TANG	03/22/2022
SHUAI TANG	03/22/2022
TA-WEI CHIU	04/05/2022
TADAKATSU OHKUBO	03/22/2022
JUN UZUHASHI	03/22/2022
KAZUHIRO HONO	03/23/2022
LUCHANG QIN	03/25/2022

RECEIVING PARTY DATA

Name:	NATIONAL INSTITUTE FOR MATERIALS SCIENCE	
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City:	IBARAKI	
State/Country:	JAPAN	
Postal Code:	305-0047	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17768017

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER:	2022-0683A	
NAME OF SUBMITTER:	KELLY GREENE	
SIGNATURE:	/Kelly Greene/	
DATE SIGNED:	04/11/2022	

Total Attachments: 4 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif

Wenderoth, Lind & Ponack, LLP Attorney Docket No.:

COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

Title of Invention

EMITTER, ELECTRON GUN IN WHICH SAME IS USED, ELECTRONIC DEVICE IN WHICH SAME IS USED, AND METHOD FOR MANUFACTURING SAME

DECLARATION

As a below named inventor, I hereby declare that:

This declaration is directed to:

☐ The attached application, or

United States application or PCT international application number <u>PCT/IP2020/039310</u> filed on <u>October 20, 2020</u>

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.

Note to Inventor: 37 C.F.R. § 1.63(c) states: "A person may not execute an oath or declaration for an application unless that person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to the person to be material to patentability as defined in § 1.56."

ASSIGNMENT

In consideration of the good and valuable consideration paid, I hereby sell and assign to

NATIONAL INSTITUTE FOR MATERIAL'S SCIENCE

(Name of Assignee)

of 2-1, Sengen 1-chome, Tsukuha-shi, Ibaraki, 305-0047 JAPAN (Address of Assignee)

(hereinafter designated as the Assigned) my entire right, title and interest for the United States as defined in 35 USC 100, for any invention set forth in the above-identified application.

I agree to execute all papers necessary in connection with this application for patent in the USPTO for the invention, and any continuation, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

I agree to execute all papers necessary in connection with any post-grant proceeding which may occur in connection with this application or continuation, divisional or reissue thereof and to cooperate with the Assignce in every way possible in obtaining evidence and going forward with such post-grant proceeding.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements, which includes the right to claim priority and the right to be granted a patent in any PCT Contracting State.			
I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.			
I hereby authorize and request the USPTO to issue any and all Letters Pa application or any continuation, divisional or reissue applications thereof interest, and covenant that I have not executed, and will not execute, any	to the Assignee, as Assignee of my entire		
First Inventor (Legal Name): <u>Jie TANG</u>			
Signature: N Tang	Date: 2021/1/22		
Second Inventor (Legal Name): Shuai TANG			
Signature: Shua Tang	Date:		
Third Inventor (Logal Name): <u>Ta-Wei CHIU</u>			
Signature:	Date:		
Fourth Inventor (Legal Name): <u>Tadakatsu OHKUBO</u>			
Signature: <u>Tadakétsu Okuke</u>	Date: 2022/3/22		
Fifth Inventor (Legal Name): Jun UZUHASHI			
Signature: Jon Uzehoshi	Date: 2022 / 3/22		
Sixth Inventor (Legal Name): Kazuhiro HONO			
Signature: /dyshin (4-20)	Date: 2022/3 / 23		
Seventh Inventor (Legal Name): Luchang QIN	1 1		
Signature: Luchy at	Date: <u>2022/3/25</u>		
Eighth Inventor (Legal Name):			
Signature:	Date:		

	Lind & Ponack, LLP et No.:	
COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION		
Title of Invention	EMITTER, ELECTRON GUN IN WHICH SAME IS USED, ELECTRONIC DEVICE IN WHICH SAME IS USED, AND METHOD FOR MANUFACTURING SAME	
As a below na	DECLARATION med inventor, I hereby declare that:	
This declaration is directed to:		
☑ United States application or PCT international application number PCT/JP2020/039310 filed on October 20, 2020		
The above-identified application was made or authorized to be made by me.		
I believe that	am the original inventor or an original joint inventor of a claimed invention in the application.	
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 risonment of not more than five (5) years, or both.	
unless that per	tor: 37 C.F.R. § 1.63(c) states: "A person may not execute an oath or declaration for an application roon has reviewed and understands the contents of the application, including the claims, and is aware disclose to the Office all information known to the person to be material to patentability as defined in ASSIGNMENT	
In consideration	on of the good and valuable consideration paid, I hereby sell and assign to	
	NSTITUTE FOR MATERIALS SCIENCE	
of 2-1, Senge (Address o	n I-chome, Tsukuba-shi, Ibaraki, 305-0047 JAPAN f Assignee)	

(hereinafter designated as the Assignee) my entire right, title and interest for the United States as defined in 35 USC 100, for any invention set forth in the above-identified application.

I agree to execute all papers necessary in connection with this application for patent in the USPTO for the invention, and any continuation, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

I agree to execute all papers necessary in connection with any post-grant proceeding which may occur in connection with this application or continuation, divisional or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such post-grant proceeding.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements, which includes the right to claim priority and the right to be granted a patent in any PCT Contracting State. I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee. I hereby authorize and request the USPTO to issue any and all Letters Patents of the United States resulting from the application or any continuation, divisional or reissue applications thereof to the Assignee, as Assignee of my entire interest, and covenant that I have not executed, and will not execute, any agreement in conflict herewith. First Inventor (Legal Name): Jie TANG Second Inventor (Legal Name): Shuai TANG Signature: Third Inventor (Legal Name): <u>Ta-Wei, CHIU</u> Signature: In wer WU Fourth Inventor (Legal Name): Tadakatsu OHKUBO Date: Fifth Inventor (Legal Name): Jun UZUHASHI Date: Signature: Sixth Inventor (Legal Name): Kazuhiro HONO Signature: Date: Seventh Inventor (Legal Name): Luchang QIN Eighth Inventor (Legal Name): Signature: ______ Date:

> PATENT REEL: 059560 FRAME: 0436

RECORDED: 04/11/2022