PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5905124

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AKITO KURAMATA	11/29/2019
SHINYA WATANABE	11/29/2019
KOHEI SASAKI	12/06/2019
KUNIAKI YAGI	12/16/2019
NAOKI HATTA	12/18/2019
MASATAKA HIGASHIWAKI	11/28/2018
KEITA KONISHI	11/29/2019

RECEIVING PARTY DATA

Name:	TAMURA CORPORATION	
Street Address:	1-19-43, HIGASHI-OIZUMI, NERIMA-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	178-8511	
Name:	SICOXS CORPORATION	
Street Address:	SHIMBASHI SUMITOMO BUILDING 7F	
Internal Address:	5-11-3 SHIMBASHI, MINATO-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	105-0004	
Name:	NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	
Street Address:	4-2-1, NUKUI-KITAMACHI, KOGANEI-SHI	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	184-8795	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16630087

CORRESPONDENCE DATA

<u>PATENT</u>

505858187 REEL: 051478 FRAME: 0279

Fax Number: (516)742-4366

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: 516-742-4343 **Email:** jmoses@ssmp.com

Correspondent Name: SCULLY SCOTT MURPHY & PRESSER, PC

Address Line 1: 400 GARDEN CITY PLAZA

Address Line 2: SUITE 300

Address Line 4: GARDEN CITY, NEW YORK 11530

ATTORNEY DOCKET NUMBER:	38038
NAME OF SUBMITTER:	PAUL J. ESATTO, JR.
SIGNATURE:	/Paul J. Esatto, Jr./
DATE SIGNED:	01/10/2020

Total Attachments: 9

source=38038_Declaration_and_Assignment#page1.tif source=38038_Declaration_and_Assignment#page2.tif source=38038_Declaration_and_Assignment#page3.tif source=38038_Declaration_and_Assignment#page4.tif source=38038_Declaration_and_Assignment#page5.tif source=38038_Declaration_and_Assignment#page6.tif source=38038_Declaration_and_Assignment#page7.tif source=38038_Declaration_and_Assignment#page8.tif source=38038_Declaration_and_Assignment#page8.tif source=38038_Declaration_and_Assignment#page9.tif

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION AND ASSIGNMENT

As a below named inventor, I hereby declare that:
This declaration the attached application, or is directed to:
United States application or PCT international application number PCT/JP2018/025900 filed on July 9 , 2018; and
entitled: SEMICONDUCTOR SUBSTRATE, SEMICONDUCTOR ELEMENT AND METHOD FOR PRODUCING SEMICONDUCTOR SUBSTRATE
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 state that I have reviewed and understand the contents of the above-identified 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 1.56.
Whereas, the undersigned inventor(s) has/have made certain inventions, improvements and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application;
Whereas, TAMURA CORPORATION, a corporation of Japan, having a place of cusiness at 1-19-43, Higashi-Oizumi, Nerima-ku, Tokyo 178-8511, Japan and SICOXS CORPORATION, a corporation of Japan, having a place of business at Shimbashi Sumitomo Building 7F, 5-11-3 Shimbashi, Minato-ku, Tokyo 105-0004, Japan and NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, a corporation of Japan, having a place of business at 4-2-1, Nukui-Kitamachi, Koganei-shi, Tokyo, 184-8795, Japan, desires to acquire, and each undersigned inventor desires to grant to TAMURA CORPORATION and SICOXS CORPORATION and NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, the entire worldwide right, title and interest in and to any and all patent applications and patents directed thereto;
Now, therefore, in consideration of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, each undersigned inventor "ASSIGNOR") hereby sells, assigns and transfers to and

1

COMMUNICATIONS TECHNOLOGY (the "ASSIGNEE"), its successors, assigns and legal representatives, the entire right, title and interest for all countries, in and to the Invention, the above-identified United States patent 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 divisional, continuing, substitute, reexamination, renewal, reissue 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 Commissioner of Patents to issue, in accordance with this assignment, any and all United States Letters Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention to said Assignee, the corporation above named, its successors, assigns and legal representatives; and agreeing to carry out in good faith the intent and purpose of this assignment, the undersigned will, for the United States and all foreign countries, execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee its successors, assigns and representatives, all facts known to the undersigned relating to said improvements and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing. maintaining and enforcing proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

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 sole or first inventor	Management
Akito KURAMATA	
Sole or first inventor's signature	Date
Sole or first inventor's signature Akita Kunamata	29, Nov., 2019
,	
Legal name of second inventor	
Shinya WATANABE	
Second inventor's signature	Date
Shinya Watanabe	Date 29 , Nov. , 2019
•	
Legal name of third inventor	
Kohei SASAKI	
Third inventor's signature	Date
Third inventor's signature	6, Dec, 2019

Legal name of fourth inventor	744
Kuniaki YAGI	
Fourth inventor's signature	Date
Legal name of fifth inventor	
Naoki HATTA	
Fifth inventor's signature	Date
Legal name of sixth inventor	
Masataka HIGASHIWAKI	
Sixth inventor's signature	Date
	W. Abbelle
r 1 0 (1)	
Legal name of seventh inventor	
Keita KONISHI	- REVOCATA AND AND AND AND AND AND AND AND AND AN
Seventh inventor's signature	Date
Karla Konishu	29 Now 2019

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION AND ASSIGNMENT

As a below named inventor, I hereby declare that:
This declaration the attached application, or is directed to:
United States application or PCT international application number PCT/JP2018/025900 filed on July 9, 2018 ; and
entitled: SEMICONDUCTOR SUBSTRATE, SEMICONDUCTOR ELEMENT AND METHOD FOR PRODUCING SEMICONDUCTOR SUBSTRATE
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 state that I have reviewed and understand the contents of the above-identified 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 1.56.
Whereas, the undersigned inventor(s) has/have made certain inventions, improvements and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application;
Whereas, TAMURA CORPORATION, a corporation of Japan, having a place of business at 1-19-43, Higashi-Oizumi, Nerima-ku, Tokyo 178-8511, Japan and SICOXS CORPORATION, a corporation of Japan, having a place of business at Shimbashi Sumitomo Building 7F, 5-11-3 Shimbashi, Minato-ku, Tokyo 105-0004, Japan and NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, a corporation of Japan, having a place of business at 4-2-1, Nukui-Kitamachi, Koganei-shi, Tokyo, 184-8795, Japan, desires to acquire, and each undersigned inventor desires to grant to TAMURA CORPORATION and SICOXS CORPORATION and NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, the entire worldwide right, title and interest in and to any and all patent applications and patents directed thereto;
Now, therefore, in consideration of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells, assigns and transfers to

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 divisional. continuing, substitute, reexamination, renewal, reissue 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 Commissioner of Patents to issue, in accordance with this assignment, any and all United States Letters Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention to said Assignee, the corporation above named, its successors, assigns and legal representatives; and agreeing to carry out in good faith the intent and purpose of this assignment, the undersigned will, for the United States and all foreign countries, execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee its successors, assigns and representatives, all facts known to the undersigned relating to said improvements and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

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.

I agal nama of gala on first inventor

regar name or sole or mist inventor	
Akito KURAMATA	
Sole or first inventor's signature	Date
Legal name of second inventor	
Shinya WATANABE	
Second inventor's signature	Date
ALATE VIEW AND ALATER VIEW AND	
Legal name of third inventor	
Kohei SASAKI	
Third inventor's signature	Date
	3000000 4/4
Legal name of fourth inventor	
Kuniaki YAGI	· · · · · · · · · · · · · · · · · · ·
Fourth inventor's signature	Date
X. Hagi	December 16, 2019
· · · · · · · · · · · · · · · · · · ·	

Legal name of fifth inventor	WARRAN AND AND AND AND AND AND AND AND AND A
Naoki HATTA	
Fifth inventor's signature	Date
Fifth inventor's signature Naofai Hatta	Date December 18.2019
Legal name of sixth inventor	
Masataka HIGASHIWAKI	
Sixth inventor's signature	Date
Legal name of seventh inventor	
Keita KONISHI	
Seventh inventor's signature	Date
	•

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION AND ASSIGNMENT

As a below named inventor, I hereby declare that:
This declaration the attached application, or is directed to:
United States application or PCT international application number PCT/JP2018/025900 filed on July 9, 2018; and
entitled: SEMICONDUCTOR SUBSTRATE, SEMICONDUCTOR ELEMENT AND METHOD FOR PRODUCING SEMICONDUCTOR SUBSTRATE
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 state that I have reviewed and understand the contents of the above-identified 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 1.56.
Whereas, the undersigned inventor(s) has/have made certain inventions, improvements and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application;
Whereas, TAMURA CORPORATION, a corporation of Japan, having a place of business at 1-19-43, Higashi-Oizumi, Nerima-ku, Tokyo 178-8511, Japan and SICOXS CORPORATION, a corporation of Japan, having a place of business at Shimbashi Sumitomo Building 7F, 5-11-3 Shimbashi, Minato-ku, Tokyo 105-0004, Japan and NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, a corporation of Japan, having a place of business at 4-2-1, Nukui-Kitamachi, Koganei-shi, Tokyo, 184-8795, Japan, desires to acquire, and each undersigned inventor desires to grant to TAMURA CORPORATION and SICOXS CORPORATION and NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, the entire worldwide right, title and interest in and to any and all patent applications and patents directed thereto;
Now, therefore, in consideration of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells, assigns and transfers to

COMMUNICATIONS TECHNOLOGY (the "ASSIGNEE"), its successors, assigns and legal representatives, the entire right, title and interest for all countries, in and to the Invention, the above-identified United States patent 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 divisional, continuing, substitute, reexamination, renewal, reissue 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 Commissioner of Patents to issue, in accordance with this assignment, any and all United States Letters Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention to said Assignee, the corporation above named, its successors, assigns and legal representatives; and agreeing to carry out in good faith the intent and purpose of this assignment, the undersigned will, for the United States and all foreign countries, execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee its successors, assigns and representatives, all facts known to the undersigned relating to said improvements and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

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 sole or first inventor	***************************************
Akito KURAMATA	
Sole or first inventor's signature	Date
Legal name of second inventor	
Shinya WATANABE	
Second inventor's signature	Date
Legal name of third inventor	
Kohei SASAKI	
Third inventor's signature	Date

Legal name of fourth inventor	
Kuniaki YAGI	
Fourth inventor's signature	Date
Legal name of fifth inventor	
Naoki HATTA	
Fifth inventor's signature	Date
Legal name of sixth inventor	
Masataka HIGASHIWAKI	
Sixth inventor's signature	Date
M	Nov 28, 2019
Legal name of seventh inventor	
Keita KONISHI	
Seventh inventor's signature	Date