505028497 07/31/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5075247

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AKIHIRO OSAKA	02/19/2016
TETSUYA KOSUGI	02/19/2016
TOKUNOBU AKAO	02/19/2016
ATSUSHI UMEKAWA	03/01/2016
MOTOYA TAKEWAKI	02/19/2016
HIDETO YAMAGUCHI	02/19/2016

RECEIVING PARTY DATA

Name:	HITACHI KOKUSAI ELECTRIC INC.
Street Address: 15-12, NISHI-SHIMBASHI 2-CHOME	
Internal Address: MINATO-KU	
City: TOKYO	
State/Country:	JAPAN
Postal Code:	105-8039

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16046682

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	HITACHI13-0001283US02
NAME OF SUBMITTER:	THOMAS A. MATTIOLI
SIGNATURE:	/Thomas A. Mattioli/
DATE SIGNED:	07/31/2018

PATENT 505028497 REEL: 046511 FRAME: 0374

Total Attachments: 8 source=0001283US02_Assignment_EFS#page1.tif source=0001283US02_Assignment_EFS#page2.tif source=0001283US02_Assignment_EFS#page3.tif source=0001283US02_Assignment_EFS#page4.tif source=0001283US02_Assignment_EFS#page5.tif source=0001283US02_Assignment_EFS#page6.tif source=0001283US02_Assignment_EFS#page7.tif source=0001283US02_Assignment_EFS#page8.tif

PATENT REEL: 046511 FRAME: 0375

ASSIGNMENT AND DECLARATION

With respect to the invention titled

SUBSTRATE PROCESSING APPARATUS, AND THERMOCOUPLE

for which the undersigned has authorized or prepared an application for United States Letters Patent, U.S. Patent Application No. 15/052,137 ____, filed on February 24, 2016 I (the undersigned) hereby state the following.

DECLARATION

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 above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56.

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 5 years, or both.

ASSIGNMENT

The undersigned hereby authorizes assignee or assignee's representative to insert the Application Number and the filing date of this application if they are unknown at the time of execution of this assignment.

Assignee	HITACHI KOKUSAI ELECTRIC INC.	
Assignee State or Country of Incorporation	Japan	
Assignee Address	14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 1018980, Japan	

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Atty. Docket No. HITACHI13-0001283US02

Assignee is desirous of acquiring the entire right, title and interest in the invention, all applications for and all letters patent issued on the invention.

For good and valuable consideration, the receipt and sufficiency of which is acknowledged, the undersigned, intending to be legally bound, does hereby sell, assign and transfer to the assignee and assignee's successors, assigns and legal representatives the entire right, title and interest in the invention and all patent applications thereon, including, but not limited to, the application for United States Letters Patent entitled as above, and all divisions and continuations thereof, and in all letters patent, including all reissues and reexaminations thereof, throughout the world, including the right to claim priority under the Paris Convention or other treaty.

It is agreed that the undersigned shall be legally bound, upon request of the assignee, to supply all information and evidence relating to the making and practice of the invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention throughout the world for the benefit of the assignee, and to execute all instruments proper to carry out the intent of this instrument.

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance.

AND this Assignment may be executed in multiple counterparts, each of which shall be deemed to be an original of this Assignment. Additionally, the undersigned hereby authorizes our attorneys to collect the signature pages of each executed counterpart and to attach those signature pages to a single copy of this instrument, which single copy and attached signature pages together shall constitute an original of this Assignment.

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SIGNATURE SHEET FOR DECLARATION AND ASSIGNMENT

Inventor's Name	OSAKA, Akihiro
Inventor's Signature	OSAKA, Akihiro February 19, 2016
Date	February 19, 2016
Signed at	Toyama-shi, Japan
	(City and Country)
STATEM	ENT OF WITNESS (optional):
	I,
	Name of Witness
was perso	onally present and did see OSAKA, Akihiro inventor identified above
execute tl	nis Assignment on and such Assignor is personally known date
to me to l	be the person described herein.
Witness Signature	
must accor	tion data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, apany this form. Use a separate form for each inventor; or check the box below and a attached page(s) to list additional inventors.

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Additional inventors are being named on the _5_ supplemental sheet(s) attached hereto.

Inventor's Name	KOSUGI, Tetsuya	
Inventor's Signature	Kosngó Je February 19,	tinya
Date	February 19,	2016
Signed at	Toyama-shi, Japan	
	(City and Country)	
STATEMI	ENT OF WITNESS (option	onal):
	I,	
		Name of Witness
was perso	onally present and did see	KOSUGI, Tetsuya
		inventor identified above
execute th	nis Assignment on	and such Assignor is personally known
to me to b	pe the person described here	ein.
Witness Signature		

Inventor's Name	AKAO, Tokunobu		
Inventor's Signature	Akao Tokanob February 19,	w	
Date	February 19,	2016	
Signed at	Toyama-shi, Japan		
·	(City and Country)		
STATEMI	ENT OF WITNESS (option	onal):	
	I,_		
		Name of Witness	
was perso	nally present and did see	AKAO, Tokunobu	
		inventor identified above	
execute th	nis Assignment on	date and such Assignor is personate	onally known
to me to b	e the person described her	ein.	
Witness Signature			

Inventor's Name '_	UMEKAWA, Atsushi
Inventor's Signature	Umehawa Stsushi March. 1. 2016
Date	March. 1. 2016
Signed at	Toyama-shi, Japan
	(City and Country)
STATEME	NT OF WITNESS (optional):
	I,
	Name of Witness
was person	ally present and did see UMEKAWA, Atsushi
	inventor identified above
execute this	s Assignment on and such Assignor is personally known date
to me to be	the person described herein.
Witness Signature	

Inventor's Name	TAKEWAKI, Motoya	
Inventor's Signature	TAKZWAKI	Motoga
Date	February 19	2016.
Signed at	Toyama-shi, Japan	•
•	(City and Country)	
STATEME	ENT OF WITNESS (option	onal):
	I,	
		Name of Witness
was perso	nally present and did see	TAKEWAKI, Motoya
		inventor identified above
execute th	is Assignment on	and such Assignor is personally known
	•	uauc
to me to be	e the person described here	∍in.
Witness Signature		*

Inventor's Name	YAMAGUCHI, Hideto		
Inventor's Signature	Histo Yamagudi February 19, 2016	····	
Date	February 19, 2016		
Signed at	Toyama-shi, Japan		
	(City and Country)		•
STATEM	ENT OF WITNESS (option	onal):	
	Ι,		
		Name of Witness	
was pers	onally present and did see	YAMAGUCHI, Hideto	
		inventor identified above	
execute t	this Assignment on	and such Assignor is pers	onally known
to me to	be the person described her	ein.	
Witness Signature			

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PATENT REEL: 046511 FRAME: 0383