## 504450635 07/11/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4497336

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
ANTHONY YU-CHANG KU	04/20/2017
XI YANG	04/20/2017
TAO LI	04/19/2017
JOHN PATRICK POLLINGER	04/26/2017
ZACHERY KENNETH MOWRY	04/19/2017
FREDERIC JOSEPH KLUG	04/22/2017

## **RECEIVING PARTY DATA**

Name:	GENERAL ELECTRIC COMPANY
Street Address:	1 RIVER ROAD
City:	SCHENECTADY
State/Country:	NEW YORK
Postal Code:	12345

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15271312

## **CORRESPONDENCE DATA**

**Fax Number:** (203)840-6495

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.

**Email:** gpo.mail@ge.com

Correspondent Name: GENERAL ELECTRIC; GLOBAL PATENT OPERATION

Address Line 1: 901 MAIN AVENUE

Address Line 4: NORWALK, CONNECTICUT 06851

ATTORNEY DOCKET NUMBER:	314239-1
NAME OF SUBMITTER: MICHAEL LATTARULO	
IGNATURE: /Michael A. Lattarulo/	
DATE SIGNED:	07/11/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 8	1

Total Attachments: 8

source=314239_1_US_Combined_Declaration_and_Assignment_2MAY2017#page1.tif	
source=314239_1_US_Combined_Declaration_and_Assignment_2MAY2017#page2.tif	
source=314239_1_US_Combined_Declaration_and_Assignment_2MAY2017#page3.tif	
source=314239_1_US_Combined_Declaration_and_Assignment_2MAY2017#page4.tif	
source=314239_1_US_Combined_Declaration_and_Assignment_2MAY2017#page5.tif	
source=314239_1_US_Combined_Declaration_and_Assignment_2MAY2017#page6.tif	
source=314239_1_US_Combined_Declaration_and_Assignment_2MAY2017#page7.tif	
source=314239_1_US_Combined_Declaration_and_Assignment_2MAY2017#page8.tif	

#### COMBINED DECLARATION AND GLOBAL ASSIGNMENT

### FOR UTILITY OR DESIGN PATENT APPLICATION

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

This declaration and assignment are directed to:

### METHODS FOR FORMING CERAMIC CORES

$\boxtimes$	the specification of which is attached hereto OR	
	United States application or PCT international application number	
	filed on,	as
	amended on [date] (if applicable).	
	(We hereby authorize and request the Company or its delegated attorneys or ag-	
	insert above the application number and filing date of the application when known.)	

The above-identified application was made or authorized to be made by us.

We believe that we are original joint inventors of a claimed invention in the application.

We hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC § 1001 by fine or imprisonment of not more than five (5) years, or both.

We have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR § 1.56, including, for continuation-in-part applications, material information which became available between the filing date of the prior application and the filing date of the continuation-in-part application.

In accordance with our obligation(s) under an Employee Innovation and Proprietary Information Agreement or (as applicable) arising out of other agreements (such as, but not limited to, the Services Agreement between General Electric Company, a New York corporation, and our employers), and/or for other good and valuable consideration of which we acknowledge receipt, I/we.

Inventor First Name	Inventor Middle Name	Inventor Last Name		Residence Town	Residence State	Residence Country
Anthony	Yu-Chung	Ku	of	Rexford	NY	USA
Xi	1 d-Orlang	Yang	of	Mason	OH	USA
Tao		Li	of	Cincinnati	ОН	USA
John	Patrick	Pollinger	of	Niskayuna	NY	USA
Zachary	Kenneth	Mowry	of	Beavercreek	ОН	USA
Frederic	Joseph	Klug	of	Schenectady	NY	USA

v9.18.12

hereby sell and assign to:

Name of Company: General Electric Company
Entity Type (optional): New York corporation
Address: 1 River Road, Schenectady, New York 12345 USA

herein referred to as "Company", its successors and assigns our entire respective rights, titles and interests in and to the invention and improvements made or conceived by us described in the application(s) listed above and in the following table:

Country of Filing	Type of Filing	Application Number	Filing Date	Title

(We hereby authorize and request the Company or its delegated attorneys or agents to insert above the application number and filing date of the application(s) when known.)

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, continuations-in-part, reexaminations, renewals, and reissues thereof, and all rights of priority resulting from the filing of the application(s), and authorize and request any official whose duty it is to issue patents, to issue any patent on the inventions and improvements resulting therefrom to the Company, or its successors or assigns, and agree that on request and without further consideration, we will communicate to the Company or its representatives or nominees any facts known to us respecting the inventions and improvements and testify in any legal proceeding, make all rightful oaths, sign all lawful papers and execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights in all countries including, but not limited to, any provisional, non-provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, for any derivation proceedings relating thereto, and, as to any patents that issue from such applications, for any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and generally do everything possible to aid the Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for the invention and its improvements in all countries.

Remuneration claims of the inventor(s)/assignor(s) potentially arising from German Law on Employee Inventions, or any other respective country law, remain unaffected by this assignment.

v9.18.12 2

GE Docket No. 314239-1		
INVENTOR 1		
Signature: Anthony Yu-Chung Ku	Date: <u>4/20/2017</u>	
Witnessed by: Signature	Date: 4/20/17	
Andrew Shapine Printed Name of Witness		
Witnessed by:	Date: <u>4/20/17</u>	
<u> </u>	75	
SECTION BELOW IS FOR USE ONLY IF SI	GNING IN PRESENCE OF A NOTARY	
	GNING IN PRESENCE OF A NOTARY  Date:	
SECTION BELOW IS FOR USE ONLY IF SI		
Anthony Yu-Chung Ku  STATE OF SS. COUNTY OF  This day of		
Anthony Yu-Chung Ku  STATE OF  SS. COUNTY OF  This day of  Anthony Yu-Chung Ku to me personally knows assignment, who acknowledged to me that he/	Date:	
Anthony Yu-Chung Ku  STATE OF SS. COUNTY OF  This day of Anthony Yu-Chung Ku, to me personally knot assignment, who acknowledged to me that he/ the purposes therein set forth.	Date:	
Anthony Yu-Chung Ku  STATE OF SS. COUNTY OF  This day of Anthony Yu-Chung Ku, to me personally knot assignment, who acknowledged to me that he/ the purposes therein set forth.	Date:	

GE Docket No. 314239-1	
Signature: Xi Yang	Date:
Witnessed by:  Signature  Ping Vang  Printed Name of Witness	Date: <u>04/20 /2017</u>
Witnessed by:  Signature  R. M. KCLKAR.  Printed Name of Witness	Date: 4120   2017
SECTION BELOW IS FOR USE ONLY IF SIGNING	3 IN PRESENCE OF A NOTARY
Date:	
Xi Yang	
STATE OF SS.	
This day of before	no executed the foregoing assignment, who
Seal	
****	(Notary Public)

V9.18.12

8

Date: 4/19/2017  Witnessed by: Signature  Steven Simpkins Printed Name of Witness  Witnessed by: Date: 4/19/2017  Signature  Date: 4/19/2017  Signature  Suresh Viswanathan Printed Name of Witness  SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY  Date:		
Witnessed by: Signature  Steven Simpkins Printed Name of Witness  Date: 41/9/2017  Suresh Viswanathan Printed Name of Witness  SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY  Date:  Tao Li  STATE OF  COUNTY OF  This day of before me personally came the above-named fao Li. to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes herein set forth.  Seel	INVENTOR 3	
Printed Name of Witness  Witnessed by:		Ze Date: 4/19/2017
Printed Name of Witness  Witnessed by:	Witnessed by: <u>JUM J. L.</u> Sjøfnature	Date: <u>4//9/2017</u>
Witnessed by: Date: 4/19/2017  Suresh Viswanathan  Printed Name of Witness  SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY  Date:		
Suresh Viswanathan  Printed Name of Witness  SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY  Date:  Tao Li  STATE OF  SS.  COUNTY OF  This day of before me personally came the above-named Tao Li, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.  Seal	Witnessed by:	Date: 4/19/2017
SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY  Date:  Tao LI  STATE OF  Ss.  COUNTY OF  This day of, before me personally came the above-named Tao LI, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.  Seal		
SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY  Date:  Tao LI  STATE OF  Ss.  COUNTY OF  This day of, before me personally came the above-named Tao LI, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.  Seal		
STATE OF  SS.  COUNTY OF  This day of, before me personally came the above-named fao Li, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.  Seal	SECTION BELOW IS FOR USE ONL	Y IF SIGNING IN PRESENCE OF A NOTARY
STATE OF  SS.  COUNTY OF  This day of, before me personally came the above-named fao LI, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes herein set forth.  Seal	Tao II manana	Date:
COUNTY OF  This day of, before me personally came the above-named fao LI, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes herein set forth.  Seal		
This day of, before me personally came the above-named fao LI, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.  Seal		
Tao LI, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.  Seal		
acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.  Seal		_,
Seal :	acknowledged to me that he/she execu	uted the same of his/her own free will for the purposes
	uicieni selicin.	
(Notary Public)		

INVENTOR 4	Date: 4/24/17
Signature: John Patrick Politinger	Date:// 20/7 /
Witnessed by: Signature	Date: <u> </u>
Judson S. Martz Printed Name of Witness	
Witnessed by: Paturon Util	Date: 4/26/17
Printed Name of Witness	
SECTION BELOW IS FOR USE ONLY IF	SIGNING IN PRESENCE OF A NOTARY
John Patrick Pollinger	Date:
STATE OF ss.	
This day of,  John Patrick Pollinger, to me personally knassignment, who acknowledged to me that he the purposes therein set forth.	before me personally came the above-name to before me personally came the above-name to be some as the individual who executed the foregoing e/she executed the same of his/her own free will foregoing the same the above-name to be same to be same the above-name to be same
Seal	
	(Notary Public)

v9.18.12

GE Docket No. 314239-1

6

GE Docket No. 314239-1	
INVENTOR 5	
Signature: Zachary Kerineth Mowry	Date: 4/19/2017
Witnessed by: Signature	Date: 4/19/2017
Tegkell Printed Name of Witness	
Witnessed by Augustan	Date: 4 · 19 · 7.017
CARY L. LYNN Printed Name of Witness	
SECTION BELOW IS FOR USE ONLY IF SK	ONING IN PRESENCE OF A NOTARY
Zachary Kenneth Mowry	Date:
STATE OF	
COUNTY OF	
<b>Zachary Kenneth Mowry</b> , to me personally kno	before me personally came the above-named own as the individual who executed the foregoing the executed the same of his/her own free will for
Seal	
	(Notary Public)

**¥9**, 18,12

3

INVENTOR 6 Signature:  Frederic Joseph Klug	'Jaie_	4/24/2017
Witnessed by: Signature	Date: _	<u> 4/22/17                                     </u>
<u>Aのできます。 との</u> Printed Name of Witness		
Witnessed by	Date: _	4/27/17
「DSEPH E、P, TON/AK Printed Name of Witness		
SECTION BELOW IS FOR USE ONLY IF SIGNING	NPRE:	ENCE OF A NOTARY
Frederic Joseph Klug		
STATE OF		
COUNTY OF		
This day of before	Ife me pe the individ Culled the	rsonally came the above-named lual who executed the foregoing same of his/her own tree will for
		(Notary Public)

v9.18.12

n

PATENT REEL: 042966 FRAME: 0330

**RECORDED: 07/11/2017** 

GE Docket No. 314239-1