# 503857467 06/06/2016

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3904116

SUBMISSION TYPE:		NEW ASSIGNMENT				
IATURE OF CONVEYANCE: ASSIGNMENT						
CONVEYING PARTY DA	٩ΤΑ					
		Name	Execution Date			
SANDIP DUTTA	06/03/2016					
JAMES ZHANG			06/03/2016			
GARY MICHAEL ITZEL			06/03/2016			
JOHN MCCONNELL DE	LVAUX		06/03/2016			
MATTHEW TROY HAFN	IER		06/03/2016			
RECEIVING PARTY DA	 ΤΔ					
Name:		AL ELECTRIC COMPANY				
Street Address:		IVER ROAD				
City:		IECTADY				
State/Country:		NEW YORK				
Postal Code:	12345					
Property Type		Number				
Application Number:		15174271	-			
CORRESPONDENCE D	ΑΤΑ					
		(717)237-5300				
Fax Number: <i>Correspondence will be</i>	e sent to	the e-mail address first; if that is ur				
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i>	e sent to provided	· · · ·				
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Fax Number: <i>Correspondence will be using a fax number, if µ</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	e sent to provided	<i>the e-mail address first; if that is ur</i> <i>I; if that is unsuccessful, it will be se</i> 717-237-5455 ksmith@mcneeslaw.com KERRI J. SMITH, PARALEGAL 100 PINE STREET P.O. BOX 1166	ent via US Mail.			
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Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU	e sent to provided	<i>the e-mail address first; if that is ur</i> <i>I; if that is unsuccessful, it will be se</i> 717-237-5455 ksmith@mcneeslaw.com KERRI J. SMITH, PARALEGAL 100 PINE STREET P.O. BOX 1166	ent via US Mail.			
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Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	e sent to provided	<i>the e-mail address first; if that is ur</i> <i>i; if that is unsuccessful, it will be se</i> 717-237-5455 ksmith@mcneeslaw.com KERRI J. SMITH, PARALEGAL 100 PINE STREET P.O. BOX 1166 HARRISBURG, PENNSYLVANIA 1710 283110/22113-0298-01	ent via US Mail.			
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## PATENT REEL: 038819 FRAME: 0276

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# 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:

#### TURBINE COMPONENT AND METHODS OF MAKING AND COOLING A TURBINE

#### COMPONENT

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L	/	`	J	

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 agents to 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
Sandip		DUTTA	of	Greenville	SC	US
James		ZHANG	of	Greenville	SC	US
Gary	Michael	ITZEL	of	Simpsonville	SC	US
John	McConnell	DELVAUX	of	Fountain Inn	SC	US

Matthew Troy HAFNER c		SC US
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hereby sell and assign to:

Name of Company: GENERAL ELECTRIC COMPANY	
Entity Type (optional): New York corporation	
Address: One 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.

PATENT REEL: 038819 FRAME: 0279

**INVENTOR 1** 

Witnessed by: Joseph a Weben Signature

Date: June 3, 2016

Date: June 3,2016

Printed Name of Witness

Witnessed by: <u>Xyy</u> M ribler\_\_\_\_

**INVENTOR 2** 

Signature: \_\_\_\_\_\_ James ZHANG

Witnessed by: \_\_\_\_\_ Signature

Printed Name of Witness

Witnessed by: \_\_\_\_\_ Signature

Date: \_\_\_\_\_

Date:

Date: \_\_\_\_\_

Printed Name of Witness

### INVENTOR 3

Signature: Jan Michael H.	Date: <u>6/3/2016</u>
Witnessed by:	Date: <u>6/3/16</u>
<u>Christephe</u> W. Kester Printed Name of Witness	, ,
Witnessed by: Kignature	Date:6 /3 / 16
ROBERT MEMER Printed Name of Witness	
INVENTOR 4	
Signature: John McConnell DELVAUX	Date:
Witnessed by: Signature	Date:
Printed Name of Witness	
Witnessed by:Signature	Date:
Printed Name of Witness	
***************************************	

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PATENT REEL: 038819 FRAME: 0281

### **INVENTOR 5**

Signature: Matthew Troy HAFNER	Date:
Witnessed by: Signature	Date:
Printed Name of Witness	
Witnessed by: Signature	Date:
Printed Name of Witness	

# 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:

#### TURBINE COMPONENT AND METHODS OF MAKING AND COOLING A TURBINE

#### COMPONENT



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 agents to insert above the application number and filing date of the application when known.)

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

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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
Sandip		DUTTA	of	Greenville	SC	US
James		ZHANG	of	Greenville	SC	US
Gary	Michael	ITZEL	of	Simpsonville	SC	US
John	McConnell	DELVAUX	of	Fountain Inn	SC	US

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hereby sell and assign to:

Name of Company: GENERAL ELECTRIC COMPANY
Entity Type (optional): New York corporation
Address: One 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.

## **INVENTOR 1**

Signature: Sandip DUTTA	Date:
Witnessed by: Signature	Date:
Printed Name of Witness	
Witnessed by:Signature	Date:
Printed Name of Witness	
INVENTOR 2 Signature:	Date: <u>6/3/20/8</u>
Witnessed by: <u>and M/C</u> Signature <u>Gerald</u> Reweliffe	Date: <u>6/3/20(6</u>
Printed Name of Witness	
Witnessed by: <u>Ritt Felth</u> Signature <u>Robert Thatcher</u> Printed Name of Witness	Date: <u>(p/3/2016</u>

PATENT REEL: 038819 FRAME: 0285

#### **INVENTOR 3**

Signature: Gary Michael ITZEL	Date:
Witnessed by: Signature	Date:
Printed Name of Witness	
Witnessed by: Signature	Date:
Printed Name of Witness	
INVENTOR 4	/ /
Signature John McConnell DELVAUX	Date: 6/3/16
Witnessed by: <u>Rola 55 Litt</u> Signature	Date: <u>6/3/2016</u>
Robert Thather Printed Name of Witness	$\bigcap$
Witnessed by: <u>Signature</u>	Date: 3, 2016
Han Tr Ympsod Printed Name of Witness	

PATENT REEL: 038819 FRAME: 0286

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**INVENTOR 5** 

Signature:	Hall	1	M	N.W.C
	Matthew Troy HAFNER			

Date: \_\_\_\_6/3/16\_\_\_\_\_

Witnessed by: Signature Nather

6/3/2016 Date:

Printed Name of Witness

Witnessed by: anature 1. RANKIN

Date: 6/3/2016

Printed Name of Witness