P.2/32 \*\*\* NO.714

Docket No.: 161441

OMB No. 0651-0027 (eve 5/31/2003)	ORM COVER SHEET U.S. DEPARTMENT OF COMMERC
PATEN	TS ONLY Patent and Trademark Office
Tab settings • • • V	<u> </u>
10 the Director of the United States Patent and Trademark Off	fice: Please record the attached original documents or copy thereof.
1. Name of conveying party(ies): Warren Arthur Nelson; Brian Peter Arness;	Name and address of receiving party(ies):
Paul Thomas Marks; Raymond Edward Chupp; and Tara	Name: General Electric Company
Easter Mcgovern	Address: 1 River Road
Additional names(s) of conveying party(ies)	
Nature of conveyance:	
☐ Security Agreement ☐ Change of Name	City: Schenectady State/Prov.; NY
☐ Other	Country: USA ZIP: 12345
Execution Date: 11/23/04; 11/24/04; 11/30/04; 11/24/04; 11/24	/ D4Additional name(s) & address(es) ロ Yes 図 No
4. Application number(s) or patent numbers(s):	
If this document is being filed together with a new application	, the execution date of the application is:
Patent Application No. Filing date	B. Patent No.(s)
10/996,878 11/24/2004	
Additional numbers	☐ Yes ☒ No
5. Name and address of party to whom correspondence concerning document should be mailed:	Total number of applications and patents involved:
Name: Philmore H. Colburn II	7. Total fee (37 CFR 3.41):\$ 40.00
Registration No. 35,101	☐ Enclosed - Any excess or insufficiency should be
Address: Cantor Colburn LLP	credited or debited to deposit account
55 Griffin Road South	Authorized to be charged to deposit account
	8. Deposit account number:
City: Bloomfield State/Prov.: CT	06-1130
Country: USA ZIP: 06002	(Attach duplicate copy of this page if paying by deposit account)
DO NOT	USE THIS SPACE
<ol> <li>Statement and signature.</li> <li>To the best of my knowledge and belief, the foregoing information of the original document.</li> </ol>	ation is true and correct and any attached copy is a true copy
Chad L. Thorson, Reg. No. 55,675	Enf How February 4, 2005
Name of Person Signing	Signature Date
Total number of pages including o	4

## **ASSIGNMENT**

In accordance with obligations entered into pursuant to an Employee Innovation and Proprietary Information Agreement or other agreement and/or for other good and valuable consideration of which I/we acknowledge receipt, I/we, Warren Arthur Nelson of 2 Stratford Court, Clifton Park, NY 12065; Brian Peter Arness of 201 Buckler Court, Simpsonville, SC 29681; Paul Thomas Marks of 134 Crane Street, Scotia, NY 12302; Raymond Edward Chupp of 119 Acom Drive, Glenville, NY 12302; and Tara Easter Mcgovern of 115 Summer Hill Road, Simpsonville, SC 29681, hereby sell and assign to General Electric Company, a New York Corporation, having an address at 1 River Road, Schenectady, New York 12345, USA, (hereinafter referred to as "Company"), its successors and assigns the entire right, title and interest in and to the invention and improvements invented and originated by me/us and described in the application for United States Patent currently entitled Pattern for the Surface of a Turbine Shroud GE Docket Number 161441

executed concurrently herewith, or

☐ filed on [date] having Serial Number [Serial Number]

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, reexaminations and reissues thereof, and all rights of priority resulting from the filing of said United States application, and authorize and request any official whose duty it is to issue patents, to issue any patent on said inventions and improvements resulting therefrom to said Company, or its successors or assigns and agree that on request and without further consideration, but at the expense of said Company, I/we will communicate to said Company or its representatives or nominees any facts known to me/us respecting said inventions and improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, reexamination and reissue applications, make all rightful oaths and generally do everything possible to aid said Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for said invention and its improvements in all countries.

PATENT REEL: 015656 FRAME: 0685

ïB.	4.2005 9:47 GE Docket No. 161	AM CANTOR COLBURN LLP 860—286—0115 44] 2	NO.714 <sup>-</sup>	Ά.
	Inventor 1			
	Signed at town o	of <u>Schenectaly</u> State of <u>NY</u> , this <u>23</u> day or	f <u>Nov.</u> ,	2004.
		Inventor:		
		Wanes Arthur Nesler	<i>Nels</i>	
	Witnessed by: Si	John albanen Date: 11-23-04 gnature		
		Joseph G. Albanese inted Name of Witness		
	Witnessed by:	laymond of withess  Date: 11/23/04  ghature		

Raymond G. Rowe Printed Name of Witness

**PATENT** 

**REEL: 015656 FRAME: 0686** 

NO.714 P.4/32 —

Inventor 2			
Signed at tow	n of, State of _	, this day of	, 2004.
		Inventor:	
		Brian Peter Arness	<del>_</del>
Witnessed by:	Signature	Date:	
	Printed Name of Witness		
Witnessed by:		Date:	
	Signature		

CANTOR COLBURN LLP 860-286-0115

EB. 4.2005 9:47AM GE Docket No. 161441

> PATENT REEL: 015656 FRAME: 0687

P.5/32 · · -- · · ---

NO.714

Inventor 3					
Signed at tow	n of, Sta	ate of	, this _	day of	, 2004.
			Inventor:		
			Paul Thomas	Marks	<u> </u>
Witnessed by		Da	te:	·	
	Signature				
	Printed Name of Witne	≑ss			
Witnessed by:	Signature	<u>-</u>	Date:		

CANTOR COLBURN LLP 860-286-0115

IB. 4.2005 9:47AM GE Docket No. 161441

> PATENT REEL: 015656 FRAME: 0688

NO.714 " P.6/32" --

Inventor 4				
Signed at tow	n of	, State of	, this day or	f, 2004.
			Inventor:	
			Raymond Edward Ch	<b>арр</b>
Witnessed by:	Signature		Date:	<del></del>
	Printed Name of	Witness		
Witnessed by:	Signature		Date:	<del></del>

CANTOR COLBURN LLP 860-286-0115

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IB. 4.2005 9:47AM GE Docket No. 161441

> PATENT REEL: 015656 FRAME: 0689

P.7/32

NO.714

Inventor 5					
Signed at tow	n of, State of		_, this	day of	, 2004.
		Invento	or		
		Tara E	aster M	cgovern	
Witnessed by:	Signature	Date:			
	Printed Name of Witness				
Witnessed by:	Signature	Date: _			_

CANTOR COLBURN LLP 860-286-0115

б

IB. 4.2005 9:47AM GE Docket No. 161441

> PATENT REEL: 015656 FRAME: 0690

NO.714 TTP.8/32

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#### **ASSIGNMENT**

In accordance with obligations entered into pursuant to an Employee Innovation and Proprietary Information Agreement or other agreement and/or for other good and valuable consideration of which I/we acknowledge receipt, I/we, Warren Arthur Nelson of 2 Stratford Court, Clifton Park, NY 12065; Brian Peter Arness of 201 Buckler Court, Simpsonville, SC 29681; Paul Thomas Marks of 134 Crane Street, Scotia, NY 12302; Raymond Edward Chupp of 119 Acorn Drive, Glenville, NY 12302; and Tara Easter Mcgovern of 115 Summer Hill Road, Simpsonville, SC 29681, hereby sell and assign to General Electric Company, a New York Corporation, having an address at 1 River Road, Schenectady, New York 12345, USA, (hereinafter referred to as "Company"), its successors and assigns the entire right, title and interest in and to the invention and improvements invented and originated by me/us and described in the application for United States Patent currently entitled Pattern for the Surface of a Turbine Shroud GE Docket Number 161441

 ⊠ executed concurrently herewith, or
 □ filed on [date] having Serial Number [Serial Number]

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, reexaminations and reissues thereof, and all rights of priority resulting from the filing of said United States application, and authorize and request any official whose duty it is to issue patents, to issue any patent on said inventions and improvements resulting therefrom to said Company, or its successors or assigns and agree that on request and without further consideration, but at the expense of said Company, I/we will communicate to said Company or its representatives or nominees any facts known to me/us respecting said inventions and improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, reexamination and reissue applications, make all rightful oaths and generally do everything possible to aid said Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for said invention and its improvements in all countries.

GE Docket No. 1	51441	2	
Inventor 1			
Signed at town	of, State of	, this day of, 2	2004.
		Inventor:	
		Warren Arthur Neslon	
Witnessed by:	Signature	Date:	
	Printed Name of Witness		
Witnessed by:		Date:	
	Signature		

FEB. 4.2005 9:48AM CANTOR COLBURN LLP 860-286-0115

Printed Name of Witness

PATENT REEL: 015656 FRAME: 0692

NO.714

P.10/32

3

Inventor 2

Signed at town of breenville, State of 5C, this 24 day of Nov., 2004.

Inventor:

Well. Date: u/24/2004

Printed Name of Witness

Witnessed by:

Date: 11/24/2004

Signature

CHRISTOPHER TRANSSEUD

Printed Name of Witness

**PATENT** 

REEL: 015656 FRAME: 0693

GE Docket No. 1	61441	4	
Inventor 3			
Signed at town	of, State of	, this day of, 2	20 <b>0</b> 4.
		Inventor:	
		Paul Thomas Marks	
Witnessed by:	Signature	Date:	
	Printed Name of Witness		
Witnessed by:		Date:	
	<u> </u>		

FEB. 4.2005 9:48AM CANTOR COLBURN LLP 860-286-0115

Printed Name of Witness

PATENT REEL: 01<u>5656</u> F<u>RAME: 0694</u>

NO.714

P.12/32

FEB. 4.2005 9:48AM CANTOR COLBURN LLP 860-286-0115 NO.714 P.13/32

PATENT REEL: 015656 FRAME: 0695

PATENT \_\_\_\_\_REEL: 015656 FRAME: 0696\_\_\_\_

1

## **ASSIGNMENT**

In accordance with obligations entered into pursuant to an Employee Innovation and Proprietary Information Agreement or other agreement and/or for other good and valuable consideration of which I/we acknowledge receipt, I/we, Warren Arthur Nelson of 2 Stratford Court, Clifton Park, NY 12065; Brian Peter Arness of 201 Buckler Court, Simpsonville, SC 29681; Paul Thomas Marks of 134 Crane Street, Scotia, NY 12302; Raymond Edward Chupp of 119 Acorn Drive, Glenville, NY 12302; and Tara Easter Mcgovern of 115 Summer Hill Road, Simpsonville, SC 29681, hereby sell and assign to General Electric Company, a New York Corporation, having an address at 1 River Road, Schenectady, New York 12345, USA, (hereinafter referred to as "Company"), its successors and assigns the entire right, title and interest in and to the invention and improvements invented and originated by me/us and described in the application for United States Patent currently entitled Pattern for the Surface of a Turbine Shroud GE Docket Number 161441

- executed concurrently herewith, or
- ☐ filed on [date] having Serial Number [Serial Number]

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, reexaminations and reissues thereof, and all rights of priority resulting from the filing of said United States application, and authorize and request any official whose duty it is to issue patents, to issue any patent on said inventions and improvements resulting therefrom to said Company, or its successors or assigns and agree that on request and without further consideration, but at the expense of said Company, I/we will communicate to said Company or its representatives or nominees any facts known to me/us respecting said inventions and improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, reexamination and reissue applications, make all rightful oaths and generally do everything possible to aid said Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for said invention and its improvements in all countries.

PATENT REEL: 015656 FRAME: 0697

GE Docket No. 161	441	2	
Inventor 1 Signed at town	of, State of	, this day of Inventor:	, 2004.
		Warren Arthur Neslon	
	Signature	Date:	
	Printed Name of Witness	_	
Witnessed by:	Signature		

EB. 4.2005 9:49AM CANTOR COLBURN LLP 860-286-0115

Printed Name of Witness

PATENT REEL: 015656 FRAME: 0698

NO.714 P.16/32

GE Docket No. 16	1441	3			
Inventor 2 Signed at town	of, State of		, this	day of	, 2004.
			ntor;		
		Bria	ın Peter A	rness	<u> </u>
Witnessed by:	Signature	Date: _			
	Printed Name of Witness	_			
Witnessed by:	Signature	Dat	te:		_
	Printed Name of Witness	<del></del>			

EB. 4.2005 9:49AM CANTOR COLBURN LLP 860-286-0115

PATENT REEL: 015656 FRAME: 0699

NO.714 P.17/32

Inventor 3

Signed at town of Greenville, State of SC, this 30 day of November 2004.

\_\_\_\_\_ Date: 11-30-04

Mandy Arnold

Date: 11/30/04

Printed Name of Witness

**REEL: 015656 FRAME: 0700** 

GE Docket No.	161441	5	
Inventor 4			
Signed at tow	n of, State of	, this day of	,2004 ر
		Inventor:	
		Raymond Edward Chupp	
Witnessed by:	Signature	Date:	
	Printed Name of Witness		
Witnessed by:	Signature	Date:	
	Printed Name of Witness		

CANTOR COLBURN LLP 860-286-0115

B. 4.2005

9:49AM

PATENT REEL: 015656 FRAME: 0701

NO.714

P.19/32

GE Docket No. 1	61441		6			
Inventor 5						
Signed at town	n of	, State of		, this	_day of _	, 2004.
			Invent	or:		
			Tara l	Easter M	cgovern	
Witnessed by:	Signature		Date:			_
	Printed Name of W					
Witnessed by:	Signature		Date:			

CANTOR COLBURN LLP 860-286-0115

B. 4.2005

9:50AM

Printed Name of Witness

PATENT REEL: 015656 FRAME: 0702

NO.714

P.20/32

## **ASSIGNMENT**

In accordance with obligations entered into pursuant to an Employee Innovation and Proprietary Information Agreement or other agreement and/or for other good and valuable consideration of which I/we acknowledge receipt, I/we, Warren Arthur Nelson of 2 Stratford Court, Clifton Park, NY 12065; Brian Peter Arness of 201 Buckler Court, Simpsonville, SC 29681; Paul Thomas Marks of 134 Crane Street, Scotia, NY 12302; Raymond Edward Chupp of 119 Acorn Drive, Glenville, NY 12302; and Tara Easter Mcgovern of 115 Summer Hill Road, Simpsonville, SC 29681, hereby sell and assign to General Electric Company, a New York Corporation, having an address at 1 River Road, Schenectady, New York 12345, USA, (hereinafter referred to as "Company"), its successors and assigns the entire right, title and interest in and to the invention and improvements invented and originated by me/us and described in the application for United States Patent currently entitled Pattern for the Surface of a Turbine Shroud GE Docket Number 161441

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- ☐ filed on [date] having Serial Number [Serial Number]

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PATENT REEL: 015656 FRAME: 0703

GE Docket No.	161441	2	
Inventor 1			
Signed at tow	n of, State of	, this day of	, 2004.
		Inventor:	
		Warren Arthur Neslon	_
Witnessed by:	Signature	Date:	
	Printed Name of Witness		
Witnessed by:		Date:	
	Signature	·	

CANTOR COLBURN LLP 860-286-0115

B. 4.2005

9:50AM

Printed Name of Witness

PATENT REEL: 015656 FRAME: 0704

NO.714

\_P.22/32

GE Docket No.	I6144I		3	
Inventor 2				
Signed at tow	n of,	State of	, this day of, Inventor:	2004,
Witnessed by:	Signature		Brian Peter Arness  Date:	
Witnessed by:	Printed Name of W		Date:	
	Printed Name of W	'		

18. 4.2005 9:50AM CANTOR COLBURN LLP 860-286-0115

PATENT REEL: 015656 FRAME: 0705

NO.714 P.23/32

GE Docket No.	161441	4	
Inventor 3			
Signed at tow	n of, State of	, this day of Inventor: Paul Thomas Marks	, 2004.
Witnessed by:	Signature	Date:	
	Printed Name of Witness		
Witnessed by:	Signature	Date:	
	Printed Name of Witness		

9:50AM CANTOR COLBURN LLP 860-286-0115

B. 4.2005

PATENT REEL: 015656 FRAME: 0706

N0.714 P.24/32

5

Inventor 4

Signed at town of GUNVILLE, State of New YORK, this 24 day of Nov., 2004.

Inventor:

Witnessed by: Morana Cary 5 Date: Nov. 24, 2004

Signature

Norman A. Turnguist

Printed Name of Witness

Witnessed by: Cynthia K. Davidheiser

Cynthia K. Davidheiser

Printed Name of Witness

**PATENT** 

REEL: 015656 FRAME: 0707

3E Docket No. 16	1441		6				
Inventor 5							
Signed at town	of	State of	, tl	his	_ day of		, 2004.
			Inventor:				
			Tara Eas	ter M	cgovern		
Witnessed by:			Date:				
	Signature						
	Printed Name of V	Witness					
Witnessed by:	<u> </u>		Date:				
	Signature						
			_				

EB. 4.2005 9:51AM CANTOR COLBURN LLP 860-286-0115

Printed Name of Witness

PATENT REEL: 015656 FRAME: 0708

NO.714

P.26/32

1

# **ASSIGNMENT**

In accordance with obligations entered into pursuant to an Employee Innovation and Proprietary Information Agreement or other agreement and/or for other good and valuable consideration of which I/we acknowledge receipt, I/we, Warren Arthur Nelson of 2 Stratford Court, Clifton Park, NY 12065; Brian Peter Arness of 201 Buckler Court, Simpsonville, SC 29681; Paul Thomas Marks of 134 Crane Street, Scotia, NY 12302; Raymond Edward Chupp of 119 Acorn Drive, Glenville, NY 12302; and Tara Easter Mcgovern of 115 Summer Hill Road, Simpsonville, SC 29681, hereby sell and assign to General Electric Company, a New York Corporation, having an address at 1 River Road, Schenectady, New York 12345, USA, (hereinafter referred to as "Company"), its successors and assigns the entire right, title and interest in and to the invention and improvements invented and originated by me/us and described in the application for United States Patent currently entitled Pattern for the Surface of a Turbine Shroud GE Docket Number 161441

- ☑ executed concurrently herewith, or
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PATENT REEL: 015656 FRAME: 0709

GE Docket No. 161	1441	-	
Inventor 1 Signed at town	of, State of	, this day of	, 2004.
- 0		Inventor:	
		Warren Arthur Neslon	_
	Signature		
	Printed Name of Witness	_	
Witnessed by:	Signature		_
	Printed Name of Witness	_	

FEB. 4.2005 9:51AM CANTOR COLBURN LLP 860-286-0115

PATENT REEL: 015656 FRAME: 0710

NO.714 P.28/32

FEB. 4.2005 9	9:52AM	CANTOR CO	DLBURN LLP	860-286-0115	5	NO.714	P.29/32
GE Docket No. 16	1441		3	3			
Inventor 2 Signed at town	- £	St	rate of	, tl	nis day of _		04.
Signed at town	01	,		Inventor:			
				Brian Pet	ter Arness		
Witnessed by:	Signature			Date:		<u></u>	
	Printed Na	me of Wi	mess				
Witnessed by:	 Signature			Date:		<del></del>	

PATENT REEL: 015656 FRAME: 0711

ventor 3	_	, State of		this	day of	, 2004.
gned at town	of	, State of		, ഫ്		
		·	Invent	OT:		
·			Paul ?	Thomas l	Marks	<u></u>
7itnessed by:			Date:		<u></u>	
	Signature					
	Printed Name	of Witness				
	Printed Name	01 44101000				
Witnessed by	<u> </u>		Date:	·		_
	Signature					

FEB. 4.2005 9:52AM CANTOR COLBURN LLP 860-286-0115

Printed Name of Witness

PATENT REEL: 015656 FRAME: 0712

NO.714 P.30/32

GE Docket No. 163	1441	5
Inventor 4 Signed at town	of, State of	, this day of, 2004. Inventor:
	Signature	Raymond Edward Chupp  Date:
Witnessed by:	Printed Name of Witness Signature	

FEB. 4.2005 9:52AM CANTOR COLBURN LLP 860-286-0115

Printed Name of Witness

PATENT REEL: 015656 FRAME: 0713

NO.714 P.31/32

5

GE Docket No. 161441

Inventor 5

this 24 day of 1/247., 2004. Signed at town of Theerwelle, State of JC

Inventor:

Jan 8 M. Tara Easter Megovern

Signature

Witnessed by: 🗾

Date:

KENIN T MC COLLIN

Printed Name of Witness

Date: 11

Printed Name of Witness Jenniter

**PATENT** REEL: 015656 FRAME: 0714

**RECORDED: 02/04/2005**