

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT5593896

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
LINNEA TAKETA	01/22/2014
TED J. FREEMAN	01/14/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ROLLS-ROYCE NORTH AMERICAN TECHNOLOGIES INC.
<b>Street Address:</b>	2059 S. TIBBS AVE.
<b>City:</b>	INDIANAPOLIS
<b>State/Country:</b>	INDIANA
<b>Postal Code:</b>	46241
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16453438
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(317)231-7433
<i>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.</i>	
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<b>Correspondent Name:</b>	BARNES & THORNBURG LLP
<b>Address Line 1:</b>	11 S. MERIDIAN STREET
<b>Address Line 4:</b>	INDIANAPOLIS, INDIANA 46204
<b>ATTORNEY DOCKET NUMBER:</b>	27163-297125/LWAG10758
<b>NAME OF SUBMITTER:</b>	SAMUEL C. GIESTING
<b>SIGNATURE:</b>	/SCG/
<b>DATE SIGNED:</b>	06/27/2019
<b>Total Attachments: 4</b>	
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ASSIGNMENT TO BUSINESS CONCERN

Attorney Docket No.: 27163-227521  
Client Reference No.: LWA-10758

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged,

Name(s) of Inventor(s) Linnea Taketa

maker(s) of an invention which is the subject of an application for Letters Patent of the United States ("Application") entitled

Title of Application GAS TURBINE ENGINE VANE END DEVICES

Serial No.: 14/132,738  
Filing Date: 12-18-2013

the undersigned (hereinafter "Assignors") hereby sell(s), assign(s), and set(s) over to

Name of Assignee Rolls-Royce North American Technologies, Inc.

Address of Assignee Business 2059 S. Tibbs Avenue  
Indianapolis, Indiana 46241

Insert State of Incorporation (if applicable) or "Not Applicable" a corporation of Delaware

(hereinafter designated as the Assignee) their entire right, title, and interest in, to, and under the Application, any and all patent applications filed in the United States and in all other countries claiming priority to the Application, all inventions disclosed therein, and any and all Letters Patent of the United States and of all other countries that may be granted for such inventions, all rights in such Letters Patent to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors had this assignment not been made.

The Assignors agree to execute any and all papers in connection with the Application, any and all patent applications filed in the United States and in all other countries claiming priority to the Application, and any Letters Patent issuing therefrom, and also to execute separate assignments as the Assignee may deem necessary or desirable.

The Assignors agree to execute any and all papers in connection with any litigation or any administrative proceeding concerning the Application, any and all patent applications filed in the United States and in all other countries claiming priority to the Application, or any Letters Patent issuing therefrom, and also to cooperate with the Assignee in every way possible in obtaining evidence and participating in any such litigation or proceeding.

The Assignors agree to execute any and all papers and to perform any and all acts which the Assignee may deem necessary or desirable in view of the provisions of the Patent Cooperation Treaty, the International Convention for Protection of Industrial Property, or similar agreements.

The Assignors agree to perform any and all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States and in all other countries where Assignee may desire patent protection, with specifications and claims in such form as shall be approved by Assignee, and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

The Assignors hereby covenant that they have the full right to convey the interests herein assigned, and that the Assignors have not executed, and will not execute, any agreement in conflict herewith.

The Assignors hereby grant the attorney of record the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent & Trademark Office for recordation of this document.

IN WITNESS WHEREOF, I have executed this assignment at Indianapolis, IN USA  
(city and state or country if outside USA)  
this 22 day of January, 2014

Outside the USA: \_\_\_\_\_  
Witnesses are required when acknowledgment before a Notary Public is not feasible. \_\_\_\_\_  
Witness

Linnea Taketa  
Inventor (Signature)  
Linnea Taketa  
Inventor (Printed Name)

ACKNOWLEDGMENT

STATE OF Indiana }  
COUNTY OF Marion } SS:

Acknowledged before me, a Notary Public, within and for said County and State. Witness my hand and Notarial Seal  
this 22nd day of January, 2014

[Signature]  
Notary Public  
Ginger Rezy  
Printed Name

My Commission Expires: 02-28-2020

Resident of Hendricks County



ASSIGNMENT TO BUSINESS CONCERN

Attorney Docket No.: 27163-227521  
Client Reference No.: LWA-10758

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged,

Name(s) of Inventor(s) Ted J. Freeman

maker(s) of an invention which is the subject of an application for Letters Patent of the United States ("Application") entitled

Title of Application GAS TURBINE ENGINE VANE END DEVICES

Serial No.: 14/132,738  
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Indianapolis, Indiana 46241

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(hereinafter designated as the Assignee) their entire right, title, and interest in, to, and under the Application, any and all patent applications filed in the United States and in all other countries claiming priority to the Application, all inventions disclosed therein, and any and all Letters Patent of the United States and of all other countries that may be granted for such inventions, all rights in such Letters Patent to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors had this assignment not been made.

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IN WITNESS WHEREOF, I have executed this assignment at INDIANAPOLIS, IN  
(city and state or country if outside USA)  
this 14 day of JANUARY, 2014

Outside the USA: \_\_\_\_\_  
Witnesses are required when acknowledgment before a Notary Public is not feasible.  
Witness \_\_\_\_\_  
Witness \_\_\_\_\_

[Signature]  
Inventor (Signature)  
Ted J. Freeman  
Inventor (Printed Name)

ACKNOWLEDGMENT

STATE OF Indiana }  
COUNTY OF Marion } SS:

Acknowledged before me, a Notary Public, within and for said County and State: Witness my hand and Notarial Seal  
this 14th day of January, 2014

[Signature]  
Notary Public  
Ginger Rezy  
Printed Name

My Commission Expires: 08-28-2020 Resident of Hendricks County

