

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5722303

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHARLES B. GRAVES	01/22/2019
RUSSELL N. BENNETT	08/22/2016
WILLIAM G. CUMMINGS III	07/28/2016
JUN SHI	02/24/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ROLLS-ROYCE CORPORATION
<b>Street Address:</b>	450 S. MERIDIAN STREET
<b>City:</b>	INDIANAPOLIS
<b>State/Country:</b>	INDIANA
<b>Postal Code:</b>	46225
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15218668
<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>	
<b>Email:</b>	aholt@btlaw.com
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<b>Address Line 4:</b>	INDIANAPOLIS, INDIANA 46204
<b>ATTORNEY DOCKET NUMBER:</b>	27163-256861/LWA11043
<b>NAME OF SUBMITTER:</b>	SAMUEL C. GIESTING
<b>SIGNATURE:</b>	/SCG/
<b>DATE SIGNED:</b>	09/17/2019
<b>Total Attachments: 8</b>	
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**PATENT**

**REEL: 050399 FRAME: 0057**

## ASSIGNMENT TO BUSINESS CONCERN

Attorney Docket No.: 27163-256861  
Client Reference No.: LWA11043**ASSIGNMENT**

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

Name(s) Charles B. Graves  
of Inventor(s)maker(s) of an invention which is the subject of an application for Letters Patent of the United States  
("Application") entitledTitle of SHELL AND TILED LINER ARRANGEMENT FOR A COMBUSTOR  
ApplicationSerial No.: 15/218,668  
Filing Date: 07/25/2016

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

Name of Rolls-Royce Corporation  
AssigneeAddress of 450 S. Meridian Street  
Assignee  
Business Indianapolis, Indiana 46225Insert State of  
Incorporation a corporation of Delaware  
(if applicable) or  
"Not Applicable"

(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.

1/22/2019

\_\_\_\_\_  
Date

*Charles B. Graves*

\_\_\_\_\_  
Inventor (Signature)

Charles B. Graves

\_\_\_\_\_  
Inventor (Printed Name)

ASSIGNMENT TO BUSINESS CONCERN

Attorney Docket No.: 27163-256861  
Client Reference No.: LWA11043

ASSIGNMENT

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

Name(s) of Inventor(s) Russell N. Bennett

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

Title of Application SHELL AND TILED LINER ARRANGEMENT FOR A COMBUSTOR

Serial No.: 15/218,668  
Filing Date: 07/25/2016

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

Name of Assignee Rolls-Royce Corporation

Address of Assignee Business 450 S. Meridian Street  
Indianapolis, Indiana 46225

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.

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8/22/16  
Date

  
Inventor (Signature)

Russell N. Bennett  
Inventor (Printed Name)

ASSIGNMENT TO BUSINESS CONCERN

Attorney Docket No.: 27163-256861  
Client Reference No.: LWA11043

**ASSIGNMENT**

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

Name(s) William G. Cummings III  
of Inventor(s)

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

Title of SHELL AND TILED LINER ARRANGEMENT FOR A COMBUSTOR  
Application

Serial No.: 15/218,668  
Filing Date: 07/25/2016

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

Name of Rolls-Royce Corporation  
Assignee

Address of 450 S. Meridian Street  
Assignee  
Business Indianapolis, Indiana 46225

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

(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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July 28, 2016  
Date

William G. Cummings III  
Inventor (Signature)

William G. Cummings III  
Inventor (Printed Name)



ASSIGNMENT TO BUSINESS CONCERN

Attorney Docket No.: 27163-256861

Client Reference No.: LWA11043

ASSIGNMENT

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

Name(s)  
of Inventor(s)

Jun Shi

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

Title of  
Application

SHELL AND TILED LINER ARRANGEMENT FOR A COMBUSTOR

Serial No.:

15/218,668

Filing Date:

07/25/2016

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

Name of  
Assignee

Rolls-Royce Corporation

Address of  
Assignee  
Business

450 S. Meridian Street

Indianapolis, Indiana 46225

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.

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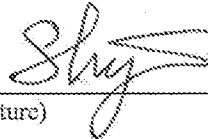
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Date

2/24/2017

Inventor (Signature)



Jun Shi

Inventor (Printed Name)