

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5300726

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	ALEXANDER WONG	12/21/2018
	MICHAEL J. WHITTLE	12/21/2018
	ANTHONY RAZZELL	12/21/2018
RECEIVING PARTY DATA		
Name:	ROLLS-ROYCE PLC	
Street Address:	62 BUCKINGHAM GATE	
City:	LONDON	
State/Country:	GREAT BRITAIN	
Postal Code:	SW1E 6AT	
PROPERTY NUMBERS Total: 1		
Property Type	Number	
Application Number:	16229274	
CORRESPONDENCE DATA		
Fax Number:	(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>		
Email:	aholt@btlaw.com	
Correspondent Name:	BARNES & THORNBURG LLP	
Address Line 1:	11 S. MERIDIAN STREET	
Address Line 4:	INDIANAPOLIS, INDIANA 46204	
ATTORNEY DOCKET NUMBER:	57502-286920/18593	
NAME OF SUBMITTER:	SAMUEL C. GIESTING	
SIGNATURE:	/SCG/	
DATE SIGNED:	12/27/2018	
Total Attachments: 3		
source=Executed_Assignments#page1.tif		
source=Executed_Assignments#page2.tif		
source=Executed_Assignments#page3.tif		

Attorney Docket No. 57502-286920Client Reference No. 18593**ASSIGNMENT FOR SINGLE ASSIGNEE**

This document is directed to:



the attached patent document(s) and/or



the below identified patent document(s):

DOCUMENT NUMBER	TITLE	FILED
16/229,274	TURBINE BLADE WITH CERAMIC MATRIX COMPOSITE AEROFOIL AND METALLIC ROOT	12/21/2018

WHEREAS, Rolls-Royce plc,a corporation (hereinafter "ASSIGNEE"), having a place of business at62 Buckingham Gate, London SW1E 6AT Great Britain,


is desirous of acquiring the entire right, title, and interest in and to the above-referenced patent document(s), all priority patent application(s) related to the above-referenced patent document(s), and/or all subject matter disclosed in the above-referenced patent document(s) and/or the related priority patent application(s) (hereinafter "INTELLECTUAL PROPERTY"), and further in and to any Letters Patent granted from the INTELLECTUAL PROPERTY worldwide;

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is acknowledged, I hereby sell, assign, and set over to ASSIGNEE, the full and exclusive right to the INTELLECTUAL PROPERTY worldwide (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the application) and the entire right, title, and interest in and to any and all Letters Patent granted on the INTELLECTUAL PROPERTY worldwide and in and to any and all divisionals, reissues, continuations, substitutions, and renewals thereof.

I hereby authorize and request the Patent Office officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of the Letters Patent, when granted, to ASSIGNEE as the assignee of my entire right, title, and interest in and to the same, for the sole use and benefit of ASSIGNEE, its successors and assigns, to the full end of the term for which the Letters Patent are granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made and hereby covenants that I have full right to convey the interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict herewith.

Further, I agree to communicate to ASSIGNEE or its representatives any facts known to me regarding the INTELLECTUAL PROPERTY, and will testify in any legal proceeding regarding the INTELLECTUAL PROPERTY, cooperate in every way possible in obtaining evidence in support of rights associated with INTELLECTUAL PROPERTY. I agree to execute all papers for divisional, continuation, substitute, renewal, and reissue applications, execute all necessary assignment papers to cause any and all of the Letters Patent to be issued to ASSIGNEE, make all rightful oaths, and generally do everything possible to aid ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for the INTELLECTUAL PROPERTY worldwide.

I 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 and Trademark Office for recordation of this assignment.

LEGAL NAME OF INVENTOR: Alexander WongSignature: Date: 12/21/2018

Attorney Docket No. 57502-286920Client Reference No. 18593**ASSIGNMENT FOR SINGLE ASSIGNEE**

This document is directed to:

- ☐ the attached patent document(s) and/or
☒ the below identified patent document(s):

DOCUMENT NUMBER	TITLE	FILED
16/229,274	TURBINE BLADE WITH CERAMIC MATRIX COMPOSITE AEROFOIL AND METALLIC ROOT	12/21/2018

WHEREAS, Rolls-Royce plc,

a corporation (hereinafter "ASSIGNEE"), having a place of business at
62 Buckingham Gate, London SW1E 6AT Great Britain,

is desirous of acquiring the entire right, title, and interest in and to the above-referenced patent document(s), all priority patent application(s) related to the above-referenced patent document(s), and/or all subject matter disclosed in the above-referenced patent document(s) and/or the related priority patent application(s) (hereinafter "INTELLECTUAL PROPERTY"), and further in and to any Letters Patent granted from the INTELLECTUAL PROPERTY worldwide;

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is acknowledged, I hereby sell, assign, and set over to ASSIGNEE, the full and exclusive right to the INTELLECTUAL PROPERTY worldwide (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the application) and the entire right, title, and interest in and to any and all Letters Patent granted on the INTELLECTUAL PROPERTY worldwide and in and to any and all divisionals, reissues, continuations, substitutions, and renewals thereof.

I hereby authorize and request the Patent Office officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of the Letters Patent, when granted, to ASSIGNEE as the assignee of my entire right, title, and interest in and to the same, for the sole use and benefit of ASSIGNEE, its successors and assigns, to the full end of the term for which the Letters Patent are granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made and hereby covenants that I have full right to convey the interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict herewith.

Further, I agree to communicate to ASSIGNEE or its representatives any facts known to me regarding the INTELLECTUAL PROPERTY, and will testify in any legal proceeding regarding the INTELLECTUAL PROPERTY, cooperate in every way possible in obtaining evidence in support of rights associated with INTELLECTUAL PROPERTY. I agree to execute all papers for divisional, continuation, substitute, renewal, and reissue applications, execute all necessary assignment papers to cause any and all of the Letters Patent to be issued to ASSIGNEE, make all rightful oaths, and generally do everything possible to aid ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for the INTELLECTUAL PROPERTY worldwide.

I 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 and Trademark Office for recordation of this assignment.

LEGAL NAME OF INVENTOR: Michael J. WhittleSignature: Michael J WhittleDate: 12/21/2018

Attorney Docket No. 57502-286920Client Reference No. 18593**ASSIGNMENT FOR SINGLE ASSIGNEE**

This document is directed to:

- ☐ the attached patent document(s) and/or
☒ the below identified patent document(s):

DOCUMENT NUMBER	TITLE	FILED
16/229,274	TURBINE BLADE WITH CERAMIC MATRIX COMPOSITE AEROFOIL AND METALLIC ROOT	12/21/2018

WHEREAS, Rolls-Royce plc,a corporation (hereinafter "ASSIGNEE"), having a place of business at
62 Buckingham Gate, London SW1E 6AT Great Britain,

is desirous of acquiring the entire right, title, and interest in and to the above-referenced patent document(s), all priority patent application(s) related to the above-referenced patent document(s), and/or all subject matter disclosed in the above-referenced patent document(s) and/or the related priority patent application(s) (hereinafter "INTELLECTUAL PROPERTY"), and further in and to any Letters Patent granted from the INTELLECTUAL PROPERTY worldwide;

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is acknowledged, I hereby sell, assign, and set over to ASSIGNEE, the full and exclusive right to the INTELLECTUAL PROPERTY worldwide (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the application) and the entire right, title, and interest in and to any and all Letters Patent granted on the INTELLECTUAL PROPERTY worldwide and in and to any and all divisionals, reissues, continuations, substitutions, and renewals thereof.

I hereby authorize and request the Patent Office officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of the Letters Patent, when granted, to ASSIGNEE as the assignee of my entire right, title, and interest in and to the same, for the sole use and benefit of ASSIGNEE, its successors and assigns, to the full end of the term for which the Letters Patent are granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made and hereby covenants that I have full right to convey the interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict herewith.

Further, I agree to communicate to ASSIGNEE or its representatives any facts known to me regarding the INTELLECTUAL PROPERTY, and will testify in any legal proceeding regarding the INTELLECTUAL PROPERTY, cooperate in every way possible in obtaining evidence in support of rights associated with INTELLECTUAL PROPERTY. I agree to execute all papers for divisional, continuation, substitute, renewal, and reissue applications, execute all necessary assignment papers to cause any and all of the Letters Patent to be issued to ASSIGNEE, make all rightful oaths, and generally do everything possible to aid ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for the INTELLECTUAL PROPERTY worldwide.

I 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 and Trademark Office for recordation of this assignment.

LEGAL NAME OF INVENTOR: Anthony RazzellSignature: Anthony RazzellDate: 12/21/2018