## 502673824 02/10/2014

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2720431

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
Kenneth Franklin UDALL	02/06/2014
David Michael BEAVEN	01/27/2014
Mark John HOULE	02/05/2014

## **RECEIVING PARTY DATA**

Name:	ROLLS-ROYCE PLC
Street Address:	65 Buckingham Gate
City:	London
State/Country:	Great Britain
Postal Code:	SW1E 6AT

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14176646

## **CORRESPONDENCE DATA**

 Fax Number:
 (703)836-2787

 Phone:
 703-836-6400

 Email:
 email@oliff.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: JAMES A. OLIFF
Address Line 1: OLIFF, PLC
Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER:	160517
NAME OF SUBMITTER:	SARAH CHOI
Signature:	/Sarah Choi/ for James A. Oliff
	PATENT

502673824 REEL: 032184 FRAME: 0549

Date:	02/10/2014
Total Attachments: 6 source=160517 2.10.14 Assignment#page1 source=160517 2.10.14 Assignment#page2 source=160517 2.10.14 Assignment#page3 source=160517 2.10.14 Assignment#page4 source=160517 2.10.14 Assignment#page5 source=160517 2.10.14 Assignment#page6	tif tif tif tif

PATENT REEL: 032184 FRAME: 0550

# ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

#### ASSIGNMENT

	Insert	(1)	Kenneth Franklin UDALL	(2)	David Michael BEAVEN	_
(1-8)	Legal Name(s)	(3)	Mark John HOULE	(4)		
	of Inventor(s)	(5)		(6)		
		(7)		(8)		
		the un		cy of which are l	r good and valuable consideration paid to each of hereby acknowledged, each undersigned agrees to	
(9)	Insert Name of Assignce	(9)	ROLLS-ROYCE PLC			
(10)	Insert Address of Assignce	(10)	10) 65 Buckingham Gate, London, SW1E 6AT, Great Britain			
		(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, confirmation, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as				
(11)	Insert Identification such as Title, Case Number, or Foreign	(11)	Propellor Blade Retention			
	Application Number	(Attor	ney Docket No. 16051	7		)
(12)	Alternative	(12)	U.S. Application Number	14/17	6,646	
	Identification for filed applications	filed	February 10,	2014		

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning any application or patents for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office and other issuing authorities to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he has full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

#### (13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

PATENT REEL: 032184 FRAME: 0551 In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	6th February 2014	Inventor Signature	Konneth Franklin Wolall Kenneth Franklin UDALL	(SEAL)
Date		Inventor Signature	David Michael BEAVEN	(SEAL)
Date		Inventor Signature	Mark John HOULE	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature	····	(SEAL)
neither	This assignment should preferably be signed it, then it should be signed before at least two wit		/)	e the U.S.A. If
Date	6th February 2014	Witness	f. J. Rodgers.  for Kenneth Franklin UDALL	
Date	6th February 2014	Witness	Seoddan for Kenneth Franklin UDALL	
Date	·	Witness	for David Michael BEAVEN	
Date		Witness	for David Michael BEAVEN	
Date		Witness	for Mark John HOULE	
Date		Witness	for Mark John HOULE	

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(1-8)	Legal Name(s)	(3)	Mark John HOULE	(4)	
	of Inventor(s)	(5)		(6)	
		(7)		(8)	
		the un		y of which are l	r good and valuable consideration paid to each of tereby acknowledged, each undersigned agrees to
(9)	Insert Name of Assignee	(9)	ROLLS-ROYCE PLC		
(10)	Insert Address of Assignee	(10)	65 Buckingham Gate, London, S	SWIE 6AT, Gre	at Britain
		the en invent contin	tire right, title and interest for the Union, and in all applications for patenuation, international, confirmation,	nited States of A it including any substitute and re	irs, successors, assigns and legal representatives, merica as defined in 35 U.S.C. §100, in the and all provisional, non-provisional, divisional, issue application(s), and all Letters Patent, by be granted on the invention known as
(11)	Insert Identification such as Title, Case	(11)	Propellor Blade Retention		
	Number, or Foreign Application Number	(Attor	ney Docket No. 160517		)
(12)	Alternative	(12)	U.S. Application Number	14/17	6,646
	Identification for filed applications	filed	February 10, 2	2014	

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- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office and other issuing authorities to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he has full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date		Inventor Signature	Kenneth Frankfin UDALL	_ (SEAL)
Date	27 January 2014	Inventor Signature	David Michael BEAVEN	
Date		Inventor Signature	David Michael Beaven	
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
neither,	This assignment should preferably be signed then it should be signed before at least two wi	before: (a) a Notary Pu itnesses who also sign h	blic if within the U.S.A. (b) a U.S. Consul if outside ere:	the U.S.A. If
Date		Witness	for Kenneth Franklin UDALL	······································
Date		Witness	for Kenneth Franklin UDALL	
Date	27 JANUARY 2014	Witness	for David Michael BEAVEN	
Date	27 JANUARY 2014	Witness	for David Michael BEAVEN	
Date		Witness	for Mark John HOULE	
Date		Witness	for Mark John HOULE	

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		the en invent contin	tire right, title and interest for the Un ion, and in all applications for patent uation, international, confirmation, s	ited States of A including any ubstitute and re	eirs, successors, assigns and legal representatives, merica as defined in 35 U.S.C. §100, in the and all provisional, non-provisional, divisional, eissue application(s), and all Letters Patent, ay be granted on the invention known as
(11)	Insert Identification such as Title, Case Number, or Foreign	(11)	Propellor Blade Retention		
	Application Number	(Atto	rney Docket No. <u>160517</u>		)
(12)	Alternative Identification for	(12)	U.S. Application Number	14/17	6,646
	filed applications	filed	February 10, 2	2014	

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date		Inventor Signature	Kenneth Franklin UDALL	_ (SEAL)
Date		Inventor Signature	David Michael BEAVEN	_ (SEAL)
Date	5-FEB-14	Inventor Signature	Mark John HOULE Mad Mad	_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
neither,	This assignment should preferably be signed then it should be signed before at least two w		blic if within the U.S.A. (b) a U.S. Consul if outside tere:	he U.S.A. Ii
Date		Witness	for Kenneth Franklin UDALL	MAY AND THE STREET STREET
Date		Witness	for Kenneth Franklin UDALL	
Date		Witness	for David Michael BEAVEN	
Date		Witness	for David Michael BEAVEN	
Date	5th FEB 2014	Witness	for Mark John HOULE Circle	
Date	5° FEB 2014	Witness	for Mark John HOULE	) .

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