					
Mail Stop: Assignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	RECORDATION FORM COVER SHEET PATENTS ONLY U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office				
Alexandria, vA 22313-1450		Attorney Docket No.	145849		
Please record the attached document.		-			
Total number of pages including cover sl	heet, attachments, and docume	ent: <u>4</u>			
1. A. Name of conveying parties:		2. A. Name and address of receiving	g party:		
[1] Bronwyn POWER [2] Liping XU [3] Steven R. WELLE B. Additional name(s) of conveyi	BORN	ROLLS-ROYCE PLO 65 BUCKINGHAM (LONDON, SW1E 6A GREAT BRITAIN B. Additional name(s) & address(GATE AT		
		7 .	s 🛛 No		
3. A. Nature of conveyance:					
☑ Assignment □] Merger				
Security Agreement	Change of Name				
B. Execution Date: [1]-May 20 [2]-June 21, 2010; [3]-May 28					
4. A. Patent Application No. 12/8	<u> 14,666</u>	B. Patent No.			
	Additional numbers attacl	ned? ☐ Yes 🏿 No			
C. Title of Application: A. C.	OMPRESSOR BLAI	<u>DE</u>			
Name and address of party to whom concerning document should be main		6. Total number of applications and pa	atents involved: 1		
Name: <u>James A. Oliff</u>		7. Please charge Deposit Account total fee (37 CFR 3.41) in the			
Address: OLIFF & BERRIDGE, I P.O. Box 320850 Alexandria, VA 22 Phone Number: 703-83 Fax Number: 703-836) 2320-4850 36-6400	Credit any overpayment or charge any underpayment to deposit account number 15-0461.			
9. Statement and signature. To the best of my knowledge and be original document. James A. Oliff, Registration No. 27, Robert G. Bachner, Registration No.) Suchne	n is true and correct and any attached cop	ry is a true copy of the		

PATENT REEL: 024595 FRAME: 0165

Date 20 MA7 2010

			ASSIG.	NMLENT				
		(1)	BRONWYN POWER	(5)	······································			
(1-8)	Insert	(2)	LIPING XU					
	Name(s) of Inventor(s)	(3)	STEVEN WELLBORN					
	,	(4)						
		, ,	h of the undersigned, each unde	one dollar (\$1.00) and other g	good and valuable consideration paid hereby does assign, transfer and set			
(9)	Insert Name of Assignee	(9)	ROLLS-ROYCE PLC					
(10) Insert Address of Assignee				ONDOM SWIF (AT CREA	AT DDITA INI			
	Assigned	(herein the ent invent contin	(10) 65 BUCKINGHAM GATE, LONDON, SWIE 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	(11)	A COMPRESSOR BLADE					
	Identification such as Title, Case		4370 PDG	· · · · · · · · · · · · · · · · · · ·				
	Number, or Foreign Application Number	(Attor	ney Docket No. 145849)				
		for wh	nich the undersigned has (have)	executed an application for p	atent in the United States of America			
		on eve	n date herewith or					
(12)	Insert Date of Signing of Application	(12)	on					
(13)	Alternative	(13)	U.S. application Serial Number	12/814,66	6			
	Identification for filed applications	filed	June 14, 2010					
the Assi claims of reexami Patents of full right and agre-	lication or continuation or dignee in every way possible: 3) Each undersigned agree or provisions of the Internation of the Internation a grant of a valid Unition a grant of a valid Unition in the United States resulting to convey the entire interests that this assignment is biolicated in the convey the entire interests that this assignment is biolicated in the convey the content of the United States resulting the convey the entire interests that this assignment is biolicated in the convey the content in the convey the entire interests that this assignment is biolicated in the convey th	livision the in obtaining to execute on all Converses to perform the converse and grown said the converse and the converse on the converse of	ereof, or any patent or reissue aing evidence and going forward ate all papers and documents any ention for Protection of Industrym all affirmative acts which mis patent to the Assignee, requests the Commissioner of tid application(s) to the said Ass	pplication based thereon, for with such interference. d perform any act which may isl Property or similar agreen ay be necessary to obtain, mathe U.S. Patent and Trademarlignee, as Assignee of the enticuted, and will not execute, as signs and legal representative. PLC the power to insert on the province of the content of the power to insert on the province of the power to insert on the property of the power to insert on the power to insert on the power to insert on the property of the power to insert on the property of the power to insert on the property of the power to insert on the power to insert on the power to insert on the property of the power to insert on the power to insert on the property of the power to insert on the power to insert on the property of the power to insert on the power to insert on the property of the power to insert on the property of t	cintain or confirm by reissue or k Office to issue any and all Letters are interest, and covenants that he has any agreements in conflict herewith, res.			
		ted by th	e undersigned on the date(s) o	pposite the undersigned na	me(s).			
Date .	5/20/2410	, 	Inventor Signature	Bronwyn Power Bu	muy Pacs (SBAL)			
Date .			Inventor Signature	Liping Xu	(SEAL)			
Date			Inventor Signature	Steven Wellborn	(SEAL)			
Date .			Inventor Signature		(SEAL)			
Date _		<u> </u>	Inventor Signature					
Date _			Inventor Signature		(SEAL)			
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ieither, ' Date		ore at leas	t two witnesses who also sign he		U.S. Consul if outside the U.S.A. If			

PATENT REEL: 024595 FRAME: 0166

Witness ADRIAN WILLOUGHBY

ASSIGNMENT

			ASSIG.	ADMICIAT			
		(1)	BRONWYN POWER	(5)			
(1-8)	Insert	(2)		(5)			
	Name(s) of layentor(s)	(3)		(7)			
	.,	(4)					
		(*)		one dollar (\$1.00) and other good an			
		to eac) over to	h of the undersigned, each unde	rsigned agrees to assign, and hereby			
(9)	Insert Name of						
(10)	Assignee Insert Address of	(9)	ROLLS-ROYCE PLC		·——-		
	Assignee		(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				
				tent including any and all provisiona			
				on, substitute and reissue application() certificates that may be granted on the			
	Y 4						
(11)	Insert Identification such as Title, Case	(11)	A COMPRESSOR BLADE 4370 PDG				
	Number, or Foreign	***	1/5	 349			
	Application Number	•					
			ich the undersigned has (have) n date herewith or	executed an application for patent in	the United States of America		
(12)	Insert Date of Signing of	(12)	On				
	Application	(.~)					
(13)	Alternative	(13)	U.S. application Serial Number	12/814,666			
	identification for filed applications	filed	June 14, 2010				
claims o reexami Patents full righ and agre	3) Each undersigned agree or provisions of the Internati 4) Each undersigned agree nation a grant of a valid Uni 5) Each undersigned author of the United States resulting t to convey the entire intereses set that this assignment is bi 6) Each undersigned herch	es to execu- onal Converse to perfor- ited States orizes and g from sail at herein a inding on the by grants the	ention for Protection of Industrian all affirmative acts which might patent to the Assignce. requests the Commissioner of the dapplication(s) to the said Assigned, and that he has not exchim and his heirs, successors, are firm of OLIFF & BERRIDGS.	with such interference. I perform any act which may be nec- lal Property or similar agreements, any be necessary to obtain, maintain the U.S. Patent and Trademark Office ignee, as Assignee of the entire intercuted, and will not execute, any agressigns and legal representatives. PLC the power to insert on this assignees of the United States Patent and the of the United States Patent and	or confirm by reissue or c to issue any and all Letters rest, and covenants that he has eements in conflict herewith, gnment any further		
	ion of this document.		·		Tracellar Office for		
_	in witness whereof, execu	ней ву сле	•	pposite the undersigned name(s).			
Date .			Inventor Signature	Bronwyn Power	(SEAL)		
Date 7	218 June 21	10	Jayentor Signature —-	Liping Xu Ling	(SEAL)		
Date			Inventor Signature	Steven Welfborn	(SEAL)		
Date		_ _	Inventor Signature		(SEAL)		
Date _			Inventor Signature		(SEAL)		
Date _			Inventor Signature		(SEAL)		
Date _			Inventor Signature		(SEAL)		
Date _			Inventor Signature		(SEAL)		
either, i Date	This assignment should pre then it should be signed before	ferably be ore at feast O	signed before: (a) a Notary Put two witnesses who also sign he Witness	dic if within the U.S.A. (b) a U.S. C	onsul if outside the U.S.A. If		

PATENT REEL: 024595 FRAME: 0167

RECORDED: 06/24/2010

			ASSIGN	NMENT	
		(1)	BRONWYN POWER	(5)	
(1-8)	Insert	(2)	LIPING XU	(6)	
	Name(s) of Inventor(s)	(3)	STEVEN WELLBORN	(7)	·
		(4)		(8)	···
(9)	Insert Name of	to each	h of the undersigned, each under o		od and valuable consideration paid ereby does assign, transfer and set
(10)	Assignee Insert Address of	(9)	ROLLS-ROYCE PLC		
	Assignee	the ent inventi contin	ire right, title and interest for the) and Assignee's heirs, successo United States of America as de tent including any and all provi m, substitute and reissue applica	rs, assigns and legal representatives, fined in 35 U.S.C. §100, in the sional, non-provisional, divisional, ation(s), and all Letters Patent,
(11)	Insert Identification	(11)	A COMPRESSOR BLADE		
	such as Title, Case		4370 PDG		~
	Number, or Foreign Application Number	(Atton	ney Docket No. 14584	9)
		for wh			lent in the United States of America
(12)	Insert Date of Signing of Application	(12)	оп		······································
(13)	Alternative	(13)	U.S. application Serial Number	12/814,666	
	Identification for filed applications	filed	June 14, 2010		
applications of the Assistance	applications for the inventions and patents as the Assi 2) Each undersigned agreedlication or continuation or dignee in every way possible 3) Each undersigned agree or provisions of the Internation a grant of a valid Union in the United States resulting the Convey the entire interests that this assignment is b 6) Each undersigned author the United States resulting the convey the entire interests that this assignment is b 6) Each undersigned hereighted the undersigned hereighted the undersigned the cation that may be necessary tion of this document.	on, and any ignee may est to executivision the in obtaining the constant of th	ate all papers necessary in connected, or any patent or reissue aping evidence and going forward with all papers and documents and cention for Protection of Industrian all affirmative acts which may patent to the Assignee. requests the Commissioner of the dapplication(s) to the said Assissigned, and that he has not exemple and him and his heirs, successors, as the firm of OLIFF & BERRIDGE, to the in order to comply with the respective and papers.	also to execute separate assign ection with any interference whe polication based thereon, for the with such interference. If the property or similar agreement and the property or similar agreement and the U.S. Patent and Trademark ignee, as Assignee of the entire ecuted, and will not execute, and segal representative. PLC the power to insert on this rules of the United States Pater	ments in connection with such nich may be declared concerning as invention, and to cooperate with the necessary in connection with this. Office to issue any and all Letters interest, and covenants that he has my agreements in conflict herewith, s. s assignment any further and Trademark Office for
	in witness whereof, execu	nea by the	e undersigned on the date(s) of	pposite the undersigned nam	
Date			Inventor Signature		(SEAL)

Date	Inventor Signature Втопмуп Power	(SEAL)
Date	Inventor Signature Liping Xu	(SEAL)
Date	May 28 70 to Inventor Signature Steven Wellborn	(SEAL)
Date	Inventor Signature	(SEAL)
Da!e	Inventor Signature	(SEAL)
Date	Inventor Signature	(SEAL)
Date	Inventor Signature	(SEAL)
Date	Inventor Signature	(SEAL)
neither, Date Date	This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if then it should be signed before at least two witnesses who also sign here: Witness Witness Witness Witness Witness	outside the U.S.A. (f

PATENT REEL: 024595 FRAME: 0168