PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3654220

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Stephen John TUPPEN	12/11/2015
Daniel CLARK	12/09/2015

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:	14966237		

CORRESPONDENCE DATA

Fax Number: (703)836-2787

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.

Phone: 703-836-6400
Email: email@oliff.com
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:	169028
NAME OF SUBMITTER:	MYIA WILLIAMS
SIGNATURE:	/Myia Williams/
DATE SIGNED:	12/11/2015

Total Attachments: 4

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PATENT 7589 REEL: 037270 FRAME: 0132

503607589

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	(I)	STEPHEN JOHN TUPPEN	(2)	DANIEL CLARK
(1-8)	Legal Name(s)	(3)		(4)	
	of Inventor(s)	(5)		(6)	
		(7)		(8)	
		the unc		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 Assignee	(10)	62 Buckingham Gate, London, SV	VIE 6AT, Gre	eat Britain
		the ent inventi continu	ire right, title and interest for the Uni on, and in all applications for patent lation, international, confirmation, su	ted States of A including any ibstitute and re	cirs, successors, assigns and legal representatives, America as defined in 35 U.S.C. §100, in the and all provisional, non-provisional, divisional, cissue application(s), and all Letters Patent, ay be granted on the invention known as
(11)	Insert Identification such as Title, Case	(11)	A METHOD OF SURFACE-TRE	ATING A CA	ST INTERMETALLIC COMPONENT
	Number, or Foreign Application Number		5706 TAL		
		(Attor	ney Docket No.)
(12)	Alternative	(12)	U.S. Application Number		
	filed applications	filed	< <application date="">></application>		

- 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
- 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.

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

Date	High Destander 7012	Inventor Signature	STEPHEN JOHN TUPPEN	SIMONTHY GEAL)
Date		Inventor Signature	DANIEL CLARK	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
neither Date	This assignment should preferably be signed, then it should be signed before at least two limits to the signed before at least two limits are signed by the signed before at least two limits are signed by the signed before at least two limits are signed by the signed before at least two limits are signed by the signed before at least two limits are signed by the signed before at least two limits are signed by the signed before at least two limits are signed by the signed before at least two limits are signed by the signed before at least two limits are signed by the signe	Witnesses who also sign h		
Date	11th December 2015	Witness for Stephen John Tuppen	ANNA TAI	A
Date		Witness for Daniel Clark		
Date		Witness for Daniel Clark		

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ASSIGNMENT

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(1-8)	Legal Name(s)	(3)		(4)		
	of Inventor(s)	(5)		(6)		
		(7)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(8)		
		the unc		f which are l	r good and valuable consideration paid to each of hereby acknowledged, each undersigned agrees t	
(9)	Insert Name of Assignee	(9)	ROLLS-ROYCE PLC			
(10)	Insert Address of Assignee	(10)	62 Buckingham Gate, London, SW	1E 6AT, Gro	eat Britain	
		the ent inventi continu	ire right, title and interest for the Unite on, and in all applications for patent in atton, international, confirmation, sub-	d States of A cluding any stitute and re	eirs, successors, assigns and legal representatives America 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	(11)	A METHOD OF SURFACE-TREA	TING A CA	ST INTERMETALLIC COMPONENT	
	Number, or Foreign Application Number		5706 TAL			
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- 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.

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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.

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

Date		Inventor Signature	STEPHEN JOHN TUPPEN	(SEAL)
Date	9th December 2015	Inventor Signature	DANIEL CLARK Damel UR	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
neither	This assignment should preferably be signed be, then it should be signed before at least two witr	efore: (a) a Notary Pub lesses who also sign he Witness for	plic if within the U.S.A. (b) a U.S. Consul if outside the ere:	U.S.A. If
Date		Stephen John Tuppen		
Date		Witness for Stephen John Tuppen		
Date	09 DECEMBER 2015	Witness for Daniel Clark	ANDREW WALFOLE A W	
Date	09 DECEMBER 2015	Witness for Daniel Clark <i>Ç</i>	GEORGE WHITEHURST GWANTE	and