11/08/2012 Mail Stop: J.S. DEPARTMENT OF COMMERCE Patent and Trademark Office Assignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450 103651349 Alexandria, VA 22313-1450 Attorney Docket No. 155456 Please record the attached original document or copy thereof. 2. A. Name and address of receiving party: Name of conveying parties: (1) Jonathan Michael MOORE ROLLS-ROYCE PLC 65 BUCKINGHAM GATE, (2) Simon Kenneth HAYDN-SMITH LONDON, SW1E 6AT, GREAT BRITAIN Additional name(s) of conveying party(ies) attached? ☐ Yes ⊠ No Additional name(s) & address(es) attached? ☐ Yes 🛛 No Nature of conveyance: Merger Assignment Change of Name Security Agreement Other\_ Execution Date: (All) October 23, 2012 This document is being filed together with a new application. B. Patent No. Patent Application No. Additional numbers attached? ☐ Yes ☒ No C. Title of Application: METHOD OF POSITIONING A CONTROL SURFACE TO REDUCE **HYSTERESIS** This Assignment is submitted for a dual purpose: (1) recording in the assignment database; and (2) for use in D. 🛛 the above-identified application as the oath or declaration pursuant to 37 CFR 1.63(c). Total number of applications and patents involved: 1 Name and address of party to whom correspondence concerning document should be mailed: Name: James A. Oliff Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00. OLIFF & BERRIDGE, PLC Address: P.O. Box 320850 Alexandria, VA 22320-4850 Credit any overpayment or charge any underpayment to deposit account number 15-0461. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is latine copy of the 1366632 original document. 49.00 DA 01 FC:8021

James A. Oliff, Registration No. 27,075 Aborn C. Chao, Registration No. 66,538

Total number of pages including cover sheet, attachments, and document: 3

PATENT REEL: 029361 FRAME: 0145

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

## ASSIGNMENT

			4					
	Insert	· (I)	JONATHAN MICHAEL MOORE	(2)	SIMON KENNETH HAYDN-SMITH			
(1.8)	Legal Name(s)	(3)		(4)				
	of Inventor(s)	(5)		(6)				
	Insert Name of Assignee Insert Address of Assignee  Insert Identification such as Title, Case Number, or Foreign Application Number	(7)		(8)				
		In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to						
(9)		(9)	ROLLS-ROYCE PLC					
(10)		(10)	65 Buckingham Gate, London, SWIE 6AT, Great Britain					
(11)		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) METHOD OF POSITIONING A CONTROL SURFACE TO REDUCE HYSTERESIS						
(**)			5001 JNR					
		(Attorney Docket No)						
(12)	Alternative	(12)	U.S. Application Number					
	Identification for filed applications	filed	< <application date="">&gt;</application>					
applica	ute separate assignments in  2) Each undersigned agre- tion or patents for the inven-	connection tes to execution and to	with such applications and patents as the A ste all papers necessary in connection with cooperate with the Assignee in every way	any in possib	plication and/or patent for the invention and also ee may deem necessary. terference which may be declared concerning any le in obtaining evidence and going forward with which may be necessary in connection with			

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.

reexamination a grant of a value Office 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 & BERRIDGE, 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: 029361 FRAME: 0146 In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	23/10/12	Inventor Signature	JONATHAN MICHAEL MOORE	_ (SEAL)
Date	23/10/12	Inventor Signature	Simon K Handa - S. HA SIMON KENNETH HAYDN-SMITH	_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Dnte		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
neither	This assignment should preferably be signed r, then it should be signed before at least two w	l before: (a) a Notary Pu itnesses who also sign t	ablic if within the U.S.A. (b) a U.S. Consul if outside there:	he U.S.A. If
Date	23/10/12	Witness	fh war	
Date	23/10/12	Witness	Comaron Koll	•