1. A. Name of conveying parties:       2. A. Name and address of receiving party:         (1) Ian TIBBOTT       (2) Ian William Robert HARROGATE         B. Additional name(s) of conveying party(ies) attached?       B. Additional name(s) of conveying party(ies) attached?         B. Additional name(s) of conveying party(ies) attached?       B. Additional name(s) & address(es) attached?         B. Additional name(s) of conveyance:       A. Nature of conveyance:         A. Nature of conveyance:       Assignment         B. Execution Date:       August 18, 2009 - BOTH         B. Execution Date:       August 18, 2009 - BOTH         J. 2.461 §1.4         4. ⊠ This document is being filed together with a new application.         A. Patent Application No.            Additional numbers attached?         Yes ⊠ No         C. Title of Application:         A COOLING ARRANGEMENT         S. Name and address of party to whom correspondence concerning document should be mailed:         Name:       James A. Oliff         7. A. Total fee (37 CFR 3.41)\$ 40.00         B. Enclosed (Check No. 221350)		Please record the attached or	ginal docum	ent or copy thereof.			
(2) Ian William Robert HARROGATE       65 BUCKINGHAM GATE         B. Additional name(s) of conveying party(ies) attached?       GREAT BRITAIN         B. Additional name(s) of conveyance:       Assignment         A. Nature of conveyance:       Assignment         B. Execution Date: August 18, 2009 - BOTH       I 24618/44         B. Execution Date: August 18, 2009 - BOTH       I 24618/44         A. Patent Application No       B. Patent No.(s)         Additional numbers attached?       Yes ⊠ No         C. Title of Application: A COOLING ARRANGEMENT       6. Total number of applications and patents involved: 1         S. Name and address of party to whom correspondence concerning document should be mailed:       6. Total fee (37 CFR 3.41)\$ 40.00	I. A. Name of conveying	parties:	2. A.	A. Name and address of receiving party:			
3. A. Nature of conveyance:         □       Assignment         □       Merger         □       Security Agreement         □       Other	(2) Ian William Rob	of conveying party(ies) attached?	B.	65 BUCKINGHAM LONDON, SW1E 62 GREAT BRITAIN Additional name(s) & addre	GATE AT ess(es) attached?		
□       Security Agreement       □       Change of Name         □       Other	3. A. Nature of conveyand	ce:		<b>_</b>			
□ Other         B. Execution Date: August 18, 2009 - BOTH         12461814         4. ☑ This document is being filed together with a new application.         A. Patent Application No         B. Patent No.(s)         Additional numbers attached?         ☐ Yes ☑ No         C. Title of Application: <u>A COOLING ARRANGEMENT</u> 5. Name and address of party to whom correspondence concerning document should be mailed:         Name: James A. Oliff         7. A. Total fee (37 CFR 3.41)\$ 40.00	Assignment	Merger					
B. Execution Date: August 18, 2009 - BOTH       J2461814         4. ⊠ This document is being filed together with a new application.       B. Patent No.(s)	Security Agreement	Change of Name					
<ul> <li>4.  ☐ This document is being filed together with a new application.</li> <li>A. Patent Application No</li></ul>	Other						
A. Patent Application No       B. Patent No.(s)         Additional numbers attached?       □ Yes ⊠ No         C. Title of Application: <u>A COOLING ARRANGEMENT</u> 5. Name and address of party to whom correspondence concerning document should be mailed:         Name: James A. Oliff         7. A. Total fee (37 CFR 3.41)\$ 40.00	B. Execution Date: <u>A</u>	ugust 18, 2009 - BOTH	12	-461814			
Additional numbers attached?       ☐ Yes ⊠ No         C. Title of Application:       A COOLING ARRANGEMENT         5. Name and address of party to whom correspondence concerning document should be mailed:       6. Total number of applications and patents involved: 1         Name:       James A. Oliff       7. A. Total fee (37 CFR 3.41)\$ 40.00	4. 🛛 This document is be	ing filed together with a new appli	cation.				
C. Title of Application: A COOLING ARRANGEMENT         5. Name and address of party to whom correspondence concerning document should be mailed:         Name: James A. Oliff         6. Total number of applications and patents involved: 1         7. A. Total fee (37 CFR 3.41)\$ 40.00	A. Patent Application 1	No	В.	Patent No.(s)			
<ul> <li>5. Name and address of party to whom correspondence concerning document should be mailed:</li> <li>Name: James A. Oliff</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. A. Total fee (37 CFR 3.41)\$ 40.00</li> </ul>		Additional numbers a	tached?	Yes 🛛 No			
concerning document should be mailed:         Name: James A. Oliff         7. A. Total fee (37 CFR 3.41)\$ 40.00	C. Title of Application	A COOLING ARRANGE	EMENT				
	•		6. Tota	I number of applications and	d patents involved: $1$		
B. Enclosed (Check No. 221350)	Name: James A. Olif	ſ	7. A.	Total fee (37 CFR 3.41)	\$ <u>40.00</u>		
			В.	Enclosed (Check No. 2213	50)		
Address:OLIFF & BERRIDGE, PLC8.Credit any overpayment or charge any underpayment to deposit account number 15-0461.Alexandria, VA22320-4850	Р.О. В	ox 320850					

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PATENT REEL: 023165 FRAME: 0292

		(1) <u>IAN TIBBOTT</u> (5)								
(1-8)	Insert	(2) LAN WILLIAM ROBERT (6) HARROGATE								
	Name(s) of Inventor(s)	(3) (7)								
		(4)(8)								
		In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, each undersigned agrees to assign, and hereby does assign, transfer and set over to								
(9)	Insert Name of Assignce	(9) ROLLS-ROYCE PLC								
(10)	Insert Address of Assignce	(10) 65 BUCKINGHAM GATE, LONDON, SWIE 6AT, GREAT BRITAIN								
		(hereinafter designated as the Assignce) and Assignce'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 COOLING ARRANGEMENT								
	Identification such as Title, Case	4204 KAW								
	Number, or Foreign Application Number	(Attorney Docket No. 142661 )								
		for which the undersigned has (have) executed an application for patent in the United States of America on even date herewith or								
(12)	Insert Date of Signing of Application	(12) on August 18, 2009-BOTH								
(13)	Alternative	(13) U.S. application Serial Number								
	Identification for filed applications	filed August 25,2009								

ASSIGNMENT

1) Each undersigned agrees to execute all papers necessary in connection with any application and any continuing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, 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 continuation or division thereof, or any patent or reissue application based thereon, 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 to issue any and all Letters Patents of the United States 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 agreements in conflict herewith, and agrees that this assignment is binding on him and his 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.

18th August 2009	Inventor Signature	Ian Tibbott Ja	n Julion	<del>и</del> - «
8th August 2009	Inventor Signature	lan William Robert Hari	1. Han	ogutes
<b>v</b>	Inventor Signature			(S
	Inventor Signature			(S
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his assignment should preferably be signe Give signed before at least type THA ATTACKET 2027 8 th AUGUST 20091	Inventor Signature	if within the U.S. <b>A</b> (b)		

PATENT REEL: 023165 FRAME: 0293

**RECORDED: 08/25/2009**