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103581214

Attorney Docket No.

143568

	Please record the attached orig	inal document or copy thereof.
1.	A. Name of conveying parties:	2. A. Name and address of receiving party:
	<ul> <li>[1] Samuel Alexander MASON</li> <li>[2] Mark David TAYLOR</li> <li>[3] Torbjorn Ola LINDQUIST</li> <li>[4] Robert John MILLER</li> <li>[5] Jonathan James Harvey HEFFER</li> <li>B. Additional name(s) of conveying party(ies) attached?</li> <li>☐ Yes ☒ No</li> </ul>	ROLLS-ROYCE PLC 65 BUCKINGHAM GATE LONDON, SW1E 6AT, GREAT BRITAIN
3.	A. Nature of conveyance:  Assignment	B. Additional name(s) & address(es) attached? □Yes ☑ No
4.	This document is being filed together with a new applica	ation.
	A. Patent Application No.(s)	B. Patent No.(s)
	Additional numbers atta  C. Title of Application: <u>A GAS TURBINE ENGINE</u>	ached? ☐ Yes ☒ No
5.	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
	Name: <u>James A. Oliff</u>	7. A. Total fee (37 CFR 3.41)\$ 40.00  B. Enclosed (Check No. 223920)
	Address: OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, VA 22320-4850	Credit any overpayment or charge any underpayment to deposit account number 15-0461.
 		44 (40 (0000 MT0M04 - 0000004 - 10F0107 0
9.	James A. Oliff, Registration No. 27,075	91 FC:8921 49.98 attories true and correct and any attached copy is a true copy of  Date: November 13, 2009
	Scott M. Schulte, Registration No. 44,325  Total number of pages in	ncluding cover sheet, attachments, and document: 4

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	nted by th	c undersigned on the date(s)	opposite the undersigned name(s).	
October	2009	Inventor Signature	Samuel Alexander Mason	(SEAL)
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		Inventor Signature	Torbjers Ola Lindgaist	(StaAta)
		Inventor Signature	Robert John Müler	(SEAL)
		Inventor Signature	Jonathan James Harvey Heiler	(SEAL)
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		(1)	SAMUEL A	LEXANDER M	ASON	(5)		TANC	HAN	JAME	S HAR	VEY	HEFFER
(1-8)	Insert	(2)	MARK DA'	VID TAYLOR		(6)							
	Name(s) of Inventor(s)	(3)	TORBIORN	OLA LINDQU	IST	(7)							
		(4)	ROBERT JO	OHN MILLER		(8)							
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•	V		ASSIGNMI	ENT		
		(1) SAMUEL ALI	EXANDER MASON	(5)	JONATHAN JAMES HA	RVEY HEFFER
1-8)	Insert	(2) MARK DAVI	TAYLOR	(6)		
	Name(s) of Inventor(s)	(3) TORBJORN (	DLA LINDQUIST	(7)		
		(4) ROBERT JOI	N MILLER	(8)		
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9)	Insert Name of Assignee	(9) ROLLS-ROYO	'E PLC			
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This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Witness

Witness

Witness

Inventor Signature

Inventor Signature

Inventor Signature \_

Date

Date

Date

(SEAL)

\_\_\_\_\_(SEAL)

## ASSIGNMENT

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	Insert	(2)	MARK DAVID TAYFOR	(11)	
	Name(s) of Inventor(s)	(3)	RURLIGURN HEA LINDQUIS	T 178	
		+ + 1	ROBERT JOHN MILLER	1261	
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	Invert Name of Assignee Invert Address of	$\{r\}_{>0}$	ROLLS-ROYCE PLC		
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	Signing of Application	9121		August 28, 2009	
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## ASSIGNMENT

		(1)	SAMUEL ALEXANDER MA	ASON	(5)!	IONATHAN JAME	S HARVEY HEFFER
(1-8)	Insert	(2)	MARK DAVID TAYLOR		(6)		
	Name(s) of Inventor(s)	(3)	TORBIORN OLA LINDQUI	ST	(7)		
		(4)	ROBERT JOHN MILLER		(8)		
			consideration of the sum of of the undersigned, each under				
(9)	Insert Name of Assignee	(9)	ROLLS-ROYCE PLC				
(10)	Insert Address of Assignee		65 BUCKINGHAM GATE, 1	ONDON S	W/117.6Δ	T GREAT BRITAL	N
	Assignee	(hereinat the entire invention continual	ter designated as the Assigned eright, title and interest for the n, and in all applications for pation, international, confirmations, reissues and reexamination	e) and Assign e United State atent includir on, substitute	ce's heirs es of Am ig any an and reis	s, successors, assignations, assignation as defined in 3 and all provisional, no sue application(s), a	s and legal representatives, 55 U.S.C. §100, in the en-provisional, divisional, and all Letters Patent,
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	Number, or Foreign Application Number	(Attorne	ry Docket No. 143568	1			)
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(12)	Insert Date of Signing of	(1 <b>2</b> ) o	on [1] October 1,	2009•	[2] (	October 12.	2009:
	Application	(12)	[3] August 26,	2009;	[4] (	§ [5] Augus	t 28, 2009
(13)	Alternative	(13) l	J.S. application Serial Numb	er			
	Identification for filed applications	filed	November 13, 20	09			
reexam  Patents full rigl and agr identifi	or provisions of the Internati 4) Each undersigned agreed ination a grant of a valid Un 5) Each undersigned author of the United States resulting to convey the entire interested that this assignment is b 6) Each undersigned hereld cation that may be necessary	onal Converts to perform ited States porizes and register from said the therein assumed in the performance on his grants therein the pygrants the	e all papers and documents and tion for Protection of Indust in all affirmative acts which materit to the Assignee. Equests the Commissioner of application(s) to the said Assigned, and that he has not exim and his heirs, successors, at firm of OLIFF & BERRIDGE in order to comply with the	rial Property nay be necess the U.S. Pate signee, as As ecuted, and assigns and I s, PLC the po	or similisary to of ent and Tasignee o will not e egal reprover to in	ar agreements. btain, maintain or c Frademark Office to f the entire interest. execute, any agreen resentatives. usert on this assignn	onfirm by reissue or sissue any and all Letters and covenants that he has nents in conflict herewith, ment any further
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Date			Inventor Signature	6		- N4	(SEAL)
Date			 Inventor Signature	Samuel A			(SEAL)
Date	26 Ang 2009		— Inventor Signature	Mark Da	n'am	O L'aligh	(SEAL)
Date	1109 00 1		 Inventor Signature	Torbjorg			(SEAL)
Date			— Inventor Signature	Robert Jo			(SEAL)
Date			 Inventor Signature			Iarvey Heffer	(SEAL)
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neither, Date	This assignment should pre	ferably be s	signed before: (a) a Notary Pt two witnesses who also sign witness	iblic if withi	n the U.S	S.A. (b) a U.S. Con:	sul if outside the U.S.A. If
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to each of the undersigned, each undersigned agrees to assign, and hereby does over to  (9)	and legal representatives, U.S.C. §100, in the -provisional, divisional, d all Letters Patent, ention known as  United States of America 2009
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Identification such as Title, Case Number, or Foreign Application Number  (Attorney Docket No. 143568  for which the undersigned has (have) executed an application for patent in the on even date herewith or  (12) Insert Date of Signing of Application  (12) On [1] October 1, 2009; [2] October 12, Application  (13) Alternative (13) U.S. application Serial Number  Identification for filed applications  (14) Each undersigned agrees to execute all papers necessary in connection with any application and any control reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in 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 any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention 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 claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary to obtain, maintain or concexamination a grant of a valid United States patent to the Assignee.  5) Each undersigned are sufficient assigned, and that he has not executed, and will not execute, any agreement 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 is recoordation of this document.  In witne	United States of America 2009 28, 2009
such as Title, Case Number, or Foreign Application Number  (Attorney Docket No. 143568  for which the undersigned has (have) executed an application for patent in the on even date herewith or  (12) Insert Date of Signing of Application  (13) Alternative Identification for filed applications  (14) U.S. application Serial Number  (15) November 13, 2009  (16) Each undersigned agrees to execute all papers necessary in connection with any application and any contrains the applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in capplications 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 any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention 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 to be a 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 convex amination 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 its Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement and agrees that this assignment is binding on him and his heirs, successors, assigns and legal representatives.  (4) Each undersigned hereby grants the firm of OLIFF & BERRIDGE, PLC the power to insert on this assignment detentification that may be necessary or desirable in order to comply with the ru	United States of America 2009 28, 2009
for which the undersigned has (have) executed an application for patent in the on even date herewith or  (12) Insert Date of Signing of Application  (13) Alternative [13] August 26, 2009; [4] & [5] August [14] & [5] August [15] August [1	United States of America  2009  28, 2009
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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).  Date  Inventor Signature	nfirm by reissue or ssue any and all Letters and covenants that he has nts in conflict herewith, any further
	(SEAL)
Date Inventor Signature Mark David Taylor	(SEAL)
Date Inventor Signature Torbjorn Ola Lindquist	(SEAL)
Date 28 August 2009 Inventor Signature Robert John Miller Robert John Miller	Mhor (SEAL)
Date 28 August 2007 Inventor Signature Jonathan James Harvey Heffer H	(SEAL)
Date Inventor Signature	/CC + f \
Date Inventor Signature	(SEAL)
Date Inventor Signature	
This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:    Date   U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:   Witness   U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:   Witness   U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:   Witness   U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:   Witness   U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:   Witness   U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:   U.S. A. U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:   Witness   U.S. Consuncither, the u.S. A. U.S. Consuncither, then it should be signed before at least two witnesses who also sign here:   U.S. A. U.S. Consuncither, the u.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither, the u.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign here:   U.S. A. U.S. Consuncither at least two witnesses who also sign	(SEAL)

PATENT REEL: 023544 FRAME: 0571

**RECORDED: 11/13/2009**