Mail Stop: Assignment Recordation S Director of the U.S. Patent and Trademark Office P.O. Box 1450	PATENTS	
Alexandria, VA 22313-1	450	Attorney Docket No. 154634
Please record the attached of Total number of pages incl	document. uding cover sheet, attachments, and docum	nent: <u>7</u>
1. A. Name of convey	ing parties:	2. A. Name and address of receiving party:
3) Wayne I 4) Kenneth 5) Ramesh	her SMITH MILLER	ROLLS-ROYCE PLC 65 BUCKINGHAM GATE, LONDON, SW1E 6AT, GREAT BRITAIN B. Additional name(s) & address(es) attached? □Yes ☑ No
3. A. Nature of convey Assignment Security Agreem Other B. Execution Date:	☐ Merger ent ☐ Change of Name	
4. A. Patent Application	n No. 13/580,245	B. Patent No.(s)
	Additional numbers attack	hed? ☐ Yes ☒ No
C. Title of Applicati	on: VIBRATION DAMPING STR	RUCTURES
concerning documents Name: James A. Oli Address: Oliff P Alexane	f & BERRIDGE, PLC O. Box 320850 Iria, VA 22320-4850	 Total number of applications and patents involved: 1 Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00. Credit any overpayment or charge any underpayment to deposit account number 15-0461.
	umber: 703-836-6400 unber: 703-836-2787	
original document.	retion No. 27,075	n is true and correct and any attached copy is a true copy of the Date: <u>August 21, 2012</u>

PATENT REEL: 028824 FRAME: 0638

ASSIGNMENT

		(1) FABRIZIO SCARPA (5) RAMESH RAJASEKARAN
(1-8)	Insert	(2) CHRISTOPHER SMITH (6)
	Name(s) of Inventor(s)	(3) <u>WAYNE MILLER</u> (7)
		(4) KENNETH EVANS (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 Assignee	(9) ROLLS-ROYCE PLC
(10)	Insert Address of Assignee	(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 Identification	(11) VIBRATION DAMPING STRUCTURES
	such as Title, Case	4542 VJAY
	Number, or Foreign Application Number	(Attorney Docket No)
		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
(13)	Alternative Identification for	(13) U.S. application Serial Number
	filed applications	filed

- 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.
- 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.

In with	ers whereof, executed by the undersigne	d on the date(s) opposite	the undersigned name(s).	
Date	27/07/2012	Inventor Signature	Fabrica Scarce	(SEAL)
			FABRIZIO SCARPA	
Dare		Inventor Signature	CHRISTOPHER SMITH	(SEAL)
Date		Investor Signature	WAYNE MILLER	(SEAL)
Date	WHETE COLUMN TO THE COLUMN TO	Investor Signature	KENNÉTH EVANS	(SEAL)
Date	-	Inventor Signature	RAMESH RAJASEKARAN	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature	1	
Date		Inventor Signature		
ncidser, Date	This assignment should preferably be sign than it should be signed before at least two 27/07/2012	witnesses who also sign l Witness	blic if within the U.S.A. (b) a U.S. Consul if outside there: Parge FOICER	he U.S.A. Ii
Date	27/07/2012	Witness For Fabrizio Scarpa	KATIE DRURY	ye
Date		For Christopher Smith		
Date		Witness For Christopher Smith	and the state of t	filmleradhlamar didocape
Date		Witness For Wayne Miller		
Date		Witness For Wayne Miller		ang kyadyan and di kan aka ada and and di didididididi di.
Date		Witness For Kenneth Eyans	About the second	angan tidaka makan ang ang ang ang ang ang ang ang ang a
Date		Witness For Kenneth Evans		willowin reference and a second secon
Date	·	Witness For Ramesb Rajasekarav)
Dair		Witness For Ramesh Rajasekaran		

ASSIGNMENT

		(1) PABRIZIO SCARPA (3) RAMESH RAJASEKARAN					
(1-8)	Insert	(2) CHRISTOPHER SMITH (6)					
	Name(s) of Inventor(s)	(3) WAYNE MILLER (7)					
•		(4) KENNETH EVANS (8)					
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(9)	Insert Name of Assignee	(9) ROLLS-ROYCE PLC					
(10)	Insert Address of Assignee	(10) 65 BUCKINGHAM GATE, LONDON, SWIE 6AT, GREAT BRITAIN .					
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	Identification such as Title, Case	4542 VJAY					
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*** ****	mess whereby, executed by the undersigner	on the date(s) opposite t	ne undersigned name(s).	
Date		Inventor Signature	FABRIZIO SCARPA	(SEAL)
Date	07/31/12	Inventor Signature	CHRISTOPHER SMITH Smith	(SEAL)
Date	07/3//12	Inventor Signature	WAYNE MILLER W. Mill	(SEAL)
Date	07/21/12	Inventor Signature	KENNETH EVANS WILL	(SEAL)
Date		Inventor Signature	RAMESH RAJASEKARAN	(SEAL)
Date		Inventor Signature		(SEAL)
Date	***************************************	Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
neither Date	This assignment should preferably be sign, then it should be signed before at least two	ed before: (a) a Notary Pub witnesses who also sign he Witness For Fabrizio Scarpa	olic if within the U.S.A. (b) a U.S. Consul if outside there:	he U.S.A.
Date		Witness For Fabrizio Scarpa		
Date	07/31/12	Witness For Christopher Smith	L.C. fond	
Date	07/31/12	Witness For Christopher Smith _	SIR.	
Date	07/31/12	Witness For Wayne Miller	R.C. Pand	
Date	07/31/12	Witness For Wayne Miller	Stall.	•
Date	07/31/12	Witness For Kenneth Evans	Mogden	
Date	07/31/12	Witness For Kenneth Evans	DWCKO	
Date		Witness For Ramesh Rajasekaran		74
Date		Witness For Ramesh Rajasekaran		

ASSIGNMENT

		(1)	ABRIZIO SCARPA		(5)	RAMESI	1 KAJASEK	AKAN	
(1-8)	Insert	(2) <u>CI</u>	HRISTOPHER SMIT	Н	(6)				
	Name(s) of Inventor(s)	(3) <u>W</u>	AYNE MILLER		(7)				
		(4) <u>KI</u>	ENNETH EVANS		(8)			A	
			onsideration of the su the undersigned, each	•		_			•
(9)	Insert Name of Assignee Insert Address of	(9) <u>RC</u>	DLLS-ROYCE PLC			 			
(10)	Assignee	(10) 65 BUCKINGHAM GATE, LONDON, SWIE 6AT, GREAT BRITAIN (hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives,							
an	Insert	invention, a continuatio extensions,	ght, title and interest and in all applications n, international, confi- reissues and reexamin BRATION DAMPIN	for patent includir rmation, substitute nation certificates t	ng any and n that m	and all proveissue applie	risional, non- cation(s), and	provisional, di all Letters Par	ivisional, tent,
(11)	Identification such as Title, Case		42 VJAY	GGIROCIORES			4.		***************************************
	Number, or Foreign Application Number	(Attorney I	Docket No.		-		· ·)
			he undersigned has (I te herewith or	have) executed an	applic	eation for pa	atent in the U	nited States of	of America
(12)	Insert Date of Signing of Application	(12) on	48						
(13)	Alternative Identification for	(13) U.S	. application Serial N	lumber	••••		······································	•••••	
	filed applications	filed							

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In wit	ness whereof, executed by the undersign	ned on the date(s) opposite	the undersigned name(s).	
Date		Inventor Signature	FABRIZIO SCARPA	(SEAL)
Date		Inventor Signature	CHRISTOPHER SMITH	(SEAL)
Date		Inventor Signature	WAYNE MILLER	(SEAL)
Date		Inventor Signature	KENNETH EVANS	(SEAL)
Date	27 Sulso 2012	Inventor Signature	RAMESH RAJASEKARAN	(SEAL)
Date		Inventor Signature		_ (SEAL)
Date	- MAN-supples of the supples of the	Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
neither Dat e	This assignment should preferably be si then it should be signed before at least to	gned before: (a) a Notary Pul wo witnesses who also sign h Witness For Fabrizio Scarpa	olic if within the U.S.A. (b) a U.S. Consul if outside cre:	the U.S.A.
Date		Witness For Fabrizio Scarpa		
Date		Witness For Christopher Smith		
Date		Witness For Christopher Smith		·····
Date		Witness For Wayne Miller		
Date		Witness For Wayne Miller		· · · · · · · · · · · · · · · · · · ·
Date		Witness For Kenneth Evans		
Date		Witness For Kenneth Evans		
Date	27 JULY 2012.	Witness For Ramesh Rajasekaran	21150	
Date	27/7/12	Witness For Ramesh Rajasekaran	Alan Staffard.	

PATENT REEL: 028824 FRAME: 0644