Mail Stop: Assignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450		RECORDATION FORM PATENTS (ONLY Patent and Trademark Office					
Please record the attached document. Total number of pages including cover sheet, attachments, and document: 3								
3.	A. Name of conveying parties: (1) Samuel Leyton SP (2) Jeffrey Charles BB B. Additional name(s) of conve	SHOP	2. A. Name and address of receiving party: ROLLS-ROYCE PLC 65 BUCKINGHAM GATE LONDON SW1E 6AT GREAT BRITAIN B. Additional name(s) & address(es) attached?					
	Assignment Security Agreement Other B. Execution Date: (1) Augu (2) Aug	☐ Merger ☐ Change of Name ast 19, 2010 gust 6, 2010	□Yes ⊠ No					
4.	A. Patent Application No							
5.	Name and address of party to who concerning document should be made		6. Total number of applications and patents involved: 1					
	Name: James A. Oliff		7. Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00.					
	Address: OLIFF & BERRI P.O. Box 320 Alexandria, VA 2 Phone Number: 70 Fax Number: 703	0850 2320-4850 3-836-6400	Credit any overpayment or charge any underpayment to deposit account number 15-0461.					
9.	Statement and signature. To the best of my knowledge and original document. James A. Oliff, Registration No. 2 Benjamin S. Prebyl, Registration	11675	on is true and correct and any attached copy is a true copy of the Date: <u>September 7, 2010</u>					

PATENT REEL: 024948 FRAME: 0188

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(1-8) Insert (2) Jeffrey Charles BISHOP (6) Name(s) (7) (4) (8) In consideration of the sum of one dollar (\$1.00) and other good each of the undersigned, each undersigned agrees to assign, and hereby (9) Insert Name of	and valuable consideration paid to does assign, transfer and set over to
Name(s) of Inventor(s) (4) (5) In consideration of the sum of one dollar (\$1.00) and other good each of the undersigned, each undersigned agrees to assign, and hereby (9) Insert Name of Assignee (9) Rolls-Royce plc (10) 65 Buckingham Gate, London SW1E 6AT, Great Britain (hereinafter designated as the Assignee) and Assignee's heirs, successore entire right, title and interest for the United States of America as defined in all applications for patent including any and all provisional, non-provintermational, confirmation, substitute and reissue application(s), and all	and valuable consideration paid to does assign, transfer and set over to
(4) (8) In consideration of the sum of one dollar (\$1.00) and other good each of the undersigned, each undersigned agrees to assign, and hereby (9) Insert Name of Assignee (9) Rolls-Royce plc (10) Insert Address of Assignee (10) 65 Buckingham Gate, London SW1E 6AT, Great Britain (hereinafter designated as the Assignee's heirs, successore entire right, title and interest for the United States of America as defined in all applications for patent including any and all provisional, non-provinternational, confirmation, substitute and reissue application(s), and all	and valuable consideration paid to does assign, transfer and set over to
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(11) Insert (11) Displacement Amplifier Identification	
such as Title, Case	
Number, or Foreign Application Number (Attorney Docket No. 146902	
for which the undersigned has (have) executed an application for paten even date herewith or	t in the United States of America on
(12) Insert Date of Signing of (12) on (1)8-19-10; (2)-8-06-10 Application	· · · · · · · · · · · · · · · · · · ·
(13) Alternative (13) U.S. application Social Number 12/876424	
Identification for filed <u>September 7, 2010</u>	
 Each undersigned agrees to execute all papers necessary in connection with any interference which application or continuation or division thereof, or any patent or reissue application based thereon, for the invent Assignee in every way possible in obtaining evidence and going forward with such interference. Each undersigned agrees to execute all papers and documents and perform any act which may be no provisions of the International Convention for Protection of Industrial Property or similar agreements. Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintair reexamination a grant of a valid United States patent to the Assignee. Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Off of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreements in assignment is binding on him and his heirs, successors, assigns and legal representatives. Each undersigned hereby grants the firm of Oliff & Berringer, ple the power to insert on this assigns be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Officence. 	cion, and to cooperate with the ecessary in connection with claims or in or confirm by reissue or lice to issue any and all Letters Patents d covenants that he has full right to conflict herewith, and agrees that this ignment any further identification that
In witness whereof, executed by the undersigned on the date(s) opposite the undersigned nam	
AVGUST 19TH 2010 Inventor Signature S Simpson Valuated	(haighon (SEAL)
Date Inventor Signature J Bishop	(SEAL)
This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S neither, then it should be signed before at least two witnesses who also sign here:	. Consul if outside the U.S.A. If
Date AUGUST 1874 2010 Witness for S Simpson	
Date Witness for S MU	
August 19th 2010 Simpson Simpson	

PATENT REEL: 024948 FRAME: 0189

			ASSIGNM	IR'IN I		
		(1)	Samuel Leyton SIMPSON	(5)	
(1-8)		(2)	Jeffrey Charles BISHOP	(6)	
	Name(s) of Inventor(s)	(3)		(7)	
		(4)		(8)	
		to eac	In consideration of the sum of the of the undersigned, each under	one dollar (\$1.	00) and other good and valuat	ole consideration paid
(9)	Insert Name of	60 5	Nella Danca etc			
(10)	Assignec) Insert Address of Assignec	(9)	Rolls-Royce pic			
		(10)	65 Buckingham Gate, Londo	n SWIE 6AT,	Great Britain	
		the en invent contin	nafter designated as the Assignee tire right, title and interest for the ion, and in all applications for pa- tuation, international, confirmation itons, reissues and reexamination	e United States atent including on, substitute ar	of America as defined in 35 U. any and all provisional, non-pri nd reissue application(s), and al	S.C. §100, in the ovisional, divisional, It Letters Patent,
(11)	l) Insert Identification such as Title, Case Number, or Foreign Application Number	(11)	Displacement Amplifier		····	
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			uich the undersigned has (have)	-		
			en date herewith or	and a to a to a to a p	protection to parent in the one	and dialog of America
(12)	Insert Date of Signing of Application	(12)	on <u>((1)8-19-10;</u>	(2) 8-06	5–10	-
(13)	Alternative	(13)	U.S. application Serial Number	er <u>12/87</u>	6,424	
	Identification for filed applications	filed	September 7, 20			
any applica any applicated the Assistants reexam Patents full rigiand agridentifit	ations and patents as the Assig 2) Each undersigned agrees plication or continuation or divisione in every way possible in 3) Each undersigned agrees or provisions of the Internatio 4) Each undersigned agrees ination a grant of a valid Unit. 5) Each undersigned author of the United States resulting that to convey the entire interest rees that this assignment is bin 6) Each undersigned hereby	thee may to executision that to execut hal converte to perfor ed States rizes and from sai herein a dding on	ate all papers necessary in connected, or any patent or reissue and going forward of the all papers and documents and tention for Protection of Industriant all affirmative acts which much the acts which the acts	ection with any pplication base with such inter d perform any sial Property or ay be necessary the U.S. Patent ignee, as Assigneuted, and will ssigns and legs PLC the power	interference which may be ded thereon, for the invention, a ference, act which may be necessary in similar agreements, to obtain, maintain or confirmend Trademark Office to issue nee of the entire interest, and not execute, any agreements I representatives.	ectared concerning and to cooperate with a connection with in by reissue or cony and all Letters covenants that he has in conflict herewith,
	In witness whereof, execute	ed by the	e undersigned on the date(s) o	pposite the un	dersigned name(s).	
Date			Inventor Signature	S Simpson		(SEAL)
Date	08/06/2	<u></u>	Inventor Signature	I Bishop		S ALL
neither,	This assignment should prefet then it should be signed before	erably be te at least	signed hefore: (a) a Notary Pub I two witnesses who also sign he	tic if within H	e U.S.A. (b) a U.S. Consul if	outside the U.S.A. If
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RECORDED: 09/07/2010