502616543 12/30/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2663135

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
David Reginald TRAINER	12/10/2013
Konstantinos KAMPISIOS	11/14/2013
Omar JASIM	12/04/2013

RECEIVING PARTY DATA

Name:	ROLLS-ROYCE PLC
Street Address:	65 Buckingham Gate
City:	London
State/Country:	Great Britain
Postal Code:	SW1E 6AT

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14085117

CORRESPONDENCE DATA

 Fax Number:
 (703)836-2787

 Phone:
 703-836-6400

 Email:
 email@oliff.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: JAMES A. OLIFF

Address Line 1: OLIFF & BERRIDGE, PLC

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER:	159649
NAME OF SUBMITTER:	JOVITA RUDD
Signature:	/Jovita Rudd/
	PATENT

REEL: 031860 FRAME: 0439

1408511

CH \$40.00

502616543

Date:	12/30/2013
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 6 source=12.30.2013 Assignment#page1.tif source=12.30.2013 Assignment#page2.tif source=12.30.2013 Assignment#page3.tif source=12.30.2013 Assignment#page4.tif source=12.30.2013 Assignment#page5.tif source=12.30.2013 Assignment#page6.tif	

PATENT REEL: 031860 FRAME: 0440

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

ASSIGNMENT

	Insert	(1)	David Reginald TRAINER	(2)	Konstantinos KAMPISIOS		
(1-8)	Legal Name(s)	(3)	Omar JASIM	(4)			
	of Inventor(s)	(5)		(6)			
		(7)		(8)			
		the une		y of which are h	r good and valuable consideration paid to each o tereby acknowledged, each undersigned agrees t		
(9)	Insert Name of Assignee	(9)	ROLLS-ROYCE PLC				
(10)	Insert Address of Assignee	(10)	65 Buckingham Gate, London, SW1E 6AT, Great Britain				
		the ent inventi continu	ire right, title and interest for the Uron, and in all applications for paternation, international, confirmation,	nited States of A it including any a substitute and re	eirs, successors, assigns and legal representatives merica as defined in 35 U.S.C. §100, in the and all provisional, non-provisional, divisional, issue application(s), and all Letters Patent, by be granted on the invention known as	١,	
(11)	Insert Identification such as Title, Case Number, or Foreign Application Number	(11)	An Electrical System				
		(Attor	ney Docket No. 159649)	
(12)	Alternative	(12)	U.S. Application Number	14/08	5,117		
	Identification for filed applications	filed	November 20,	2013			

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention 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 patents 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 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: 031860 FRAME: 0441 In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	10 December 2013	Inventor Signature	David Train DR Trainer	24-	(SEAL)
Date		Inventor Signature	K Kampisios		(SEAL)
Date		Inventor Signature	O Jasim		(SEAL)
Date		Inventor Signature			(SEAL)
Date		Inventor Signature			(SEAL)
Date		Inventor Signature			(SEAL)
Date		Inventor Signature			(SEAL)
Date		Inventor Signature			(SEAL)
neither	This assignment should preferably be signed, then it should be signed before at least two w			a U.S. Consul if outs	side the U.S.A. If
Date	10 DECEMBER 2013	Witness	for D.A. Trainer	k Dyke	
Date	10 DECEMBER 2013	Witness	Polo R Trainer	FRANCISCO	JOSE MORENO
Date		Witness	for K Kampisios		
Date		Witness	for K Kampisios		
Date		Witness .	for O Jasim	M Adv	
Date		Witness	for O Jasim		

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

ASSIGNMENT

	Insert	(1)	David Reginald TRAINER	(2)	Konstantinos KAMPISIOS
(1-8)	Legal Name(s)	(3)	Omar JASIM	(4)	
	of Inventor(s)	(5)		(6)	
		(7)		(8)	
		the un		y of which are l	r good and valuable consideration paid to each of nereby acknowledged, each undersigned agrees to
(9)	Insert Name of Assignee	(9)	ROLLS-ROYCE PLC		
(10)	Insert Address of Assignee	(10)	eat Britain		
		the entinvent contin	tire right, title and interest for the Union, and in all applications for patent uation, international, confirmation, s	ited States of A tincluding any ubstitute and re	pirs, successors, assigns and legal representatives, temerica as defined in 35 U.S.C. §100, in the and all provisional, non-provisional, divisional, eissue application(s), and all Letters Patent, asy be granted on the invention known as
(11)	Insert Identification such as Title, Case Number, or Foreign	(11)	An Electrical System		
	Application Number	(Attor	ney Docket No. <u>159649</u>)
(12)	Alternative Identification for	(12)	U.S. Application Number	14/085	5,117
	filed applications	filed	November 20, 20	013	

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention 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 patents 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 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.

In witness whereof, executed by the undersigned on the date(s) apposite the undersigned name(s).

Date				Inventor Signature	D R Trainer	(SEAL)
Date		Voewber	2013	Inventor Signature	K Kampisios	(SEAL)
Date				Inventor Signature	O Iasim	(SEAL)
Date	·			Inventor Signature	·	(SEAL)
Date	·····			Inventor Signature	<u> </u>	(SEAL)
Date				Inventor Signature		(SEAL)
Date				Inventor Signature		(SEAL)
Date				Investor Signature		(SEAL)
neither.	This assignment then it should	ent should prefera be signed before :	bly be signed it least two wi	before: (a) a Netary Pu tnesses who also sign h	blic if within the U.S.A. (b) a U.S. Consulere:	if outside the U.S.A. If
Date				Witness	for D R Trainer	
Date		······································		Witness	for D R Trainer	**************************************
Date	<u> </u>	<u> </u>	<u> </u>	Witness	for K Kampisios	
Date	<u> 14 Nov</u>	CANDECK G	<u>013</u>	Witness	for K Kampisios	<u> </u>
Date				Witness	for O Jasim	
Date				Witness	for O lusim	

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

ASSIGNMENT

Phase 2 Phase and Physics Philips

	mone	(1) David Regimes (1874) (2) Communities RAMPISIOS
(1-8)	Legal Name(s)	O) Omeriand Foddel JASIM //
	of inventor(s)	(5) 4th Oceamber 2013 Comb
		(7)
		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 bereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to
(9)	Insert Name of Assignee	(9) BOLLS-ROYCE PLC
(18)	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 such as Title, Case	(11) An Electrical System
	Number, or Fereign Application Number	(Attorney Docket No159649)
(12)	Alternative Identification for	(12) U.S. Application Number 14/085,117
	filed applications	Movember 20, 2013

 Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention 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 patents 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 of 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 Assegner.

5) Each undersigned authorizes and requests the Commissioner of the U.S. Parent 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 herem assigned, and that he has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is hinding on Assignor and Assignor's heirs, successors, assigns and legal representatives.

6) Each undersigned hereby grants the firm of OLIFF & BERRIDGE, FLC 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.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date		Inventor Signature	D R Trainer	(SEAL)
Date		Inventor Signature	e K Kampisios	(SEAL)
Date	4th December 2013	Inventor Signature	0 fg/ Jassian	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature	·	(SEAL)
Date		Investor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
neither,	This assignment should preferably be signed then it should be signed before at least two will	before: (a) a Notary Pi messes who siso sign I	ublic if within the U.S.A. (b) a U.S. Consul if outside the here:	эD.8.А. В
Date		Witness	for D.R. Trainer	······
Date		Witness	for D R Trainer	
Date		Witness	for K Kampistos	•••••••••••••••••••••••••••••••••••••••
Sate .		Witness	for K Kamptsics	
Jate	4 PEC 2013	Witness	1000 Jasim JC Ook Prof	Jon Clare.
)ate	MA DECEMBER 2013	Witness	100 O Jasim 1940 1940 1940 1940 1940 1940 1940 1940	<u> 5. co</u> 47564

2

PATENT REEL: 031860 FRAME: 0446