503885573 06/23/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3932222

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mark C HARDY	06/03/2016
Howard J STONE	06/08/2016
Nicholas G JONES	06/08/2016
Paul M MIGNANELLI	06/08/2016

RECEIVING PARTY DATA

Name:	Rolls-Royce Pic
Street Address:	62 Buckingham Gate
City:	London
State/Country:	Great Britain
Postal Code:	SW1E 6AT

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15190502

CORRESPONDENCE DATA

Fax Number: (703)836-2787

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 703-836-6400 Email: email@oliff.com **Correspondent Name:** JAMES A. OLIFF **OLIFF PLC** Address Line 1:

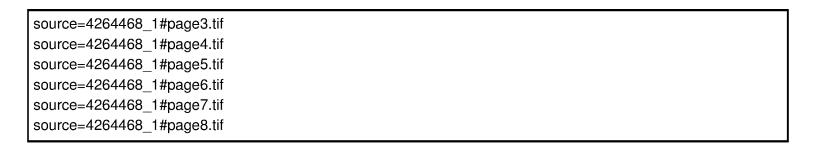
Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER:	171759
NAME OF SUBMITTER:	RYAN GUNNING
SIGNATURE:	/Ryan Gunning/
DATE SIGNED:	06/23/2016

Total Attachments: 8

source=4264468 1#page1.tif source=4264468_1#page2.tif



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

ASSIGNMENT

			Hardy, Mark C
/4 /B\	Insert Degat (10 me(d) bi		Stone, Howard J
(1-8)			Jones , Nicholas G
			Mignanelli, Paul M
			or (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and wiedged, each undersigned agrees to assign, and hereby does assign, transfer and set over to
(9)	Insert Name of Assig	gnee	ROLLS-ROYCE pic
(10)	Insert Address of As	signee	62 Buckingham Gate, London, SW1E 6AT, Great Britain
	for the United States of Ameri provisional, non-provisional, a	ca as defi livisional) and Assignce's heirs, successors, assigns and legal representatives, the entire right, title and interest ined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all continuation, international, confirmation, substitute and reissue application(s), and all Letters ination certificates that may be granted on the invention known as
(11)	Insert Identification	(H)	Ni-base Alloy for Structural Applications
	such as Title, Case Number, or Foreign Application Number	_	5883 DWM
		(Atto	rney Docket No. 171759
(12)	Alternative	(12)	U.S. Application Number 15/190,502
	Identification for		
	filed applications	filed	June 23, 2016
	for the invention and as the Assignee may do 2) Each undersigned ag be declared concerning every way possible in 3) Each undersigned ag necessary in connection Industrial Property or 4) Each undersigned ag confirm by reissue or	also to deem negrees to gany a obtaining the store of the similar prees to reexam	execute all papers necessary in connection with any interference which may application or patents for the invention and to cooperate with the Assignee in ling evidence and going forward with such interference. • execute all papers and documents and perform any act which may be claims or provisions of the International Convention for Protection of

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

6) Each undersigned hereby grants the firm of **Oliff pic** 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.

representatives.

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.

Inven	tor					
(Print	. name)	MAR	k c then	γ	MICHL	
Dute	3	JUNE	2016	Inventor Signatur		(SEAL)
Cons					(a) a Notary Public if within the ned before at least two witnesse	
Date	3	TUNE	2016	Witness	THOMAS J JACKSON	Then Takes
Dute	.5.5	UNE	2016	Witness	TAIN MO PARS	Fre Boule

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

ASSIGNMENT

Hardy, Mark C

4 65	Insert Legal Name(s) of Inventor(s)		Stone, Howard J	
1-8)			Jones , Nicholas G	
			Mignanelli, Paul M	
	In consideration of the sum of sufficiency of which are hereb	one doll y acknov	ar (\$1,00) and other good and valuable consideration paid to each of the undersigned, the receipt viedged, each undersigned agrees to assign, and hereby does assign, transfer and set over to	t and
9)	Insert Name of Assig	gnce	ROLLS-ROYCE plc	
10)	Insert Address of As	signee	62 Buckingham Gate, London, SW1E 6AT, Great Britain	
	for the United States of Americanovisional, de-	ca as def lívisiona) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and intined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all, continuation, international, confirmation, substitute and reissue application(s), and all Letters ination certificates that may be granted on the invention known as	erest
11)	Insert Identification	(11)	Ni-base Alloy for Structural Applications	
	such as Title, Case Number, or Foreign		5883 DWM	
	Application Number	(Attorney Docket No.)
12)	Alternative	(12)	U.S. Application Number	
	Identification for			
	filed applications	filed		
	for the invention and a as the Assignee may d 2) Bach undersigned ag be declared concerning every way possible in 3) Each undersigned ag necessary in connectic Industrial Property or 4) Each undersigned ag confirm by reissue or 5) Each undersigned au other issuing authorities a Assignee of the ent assigned, and that he hagrees that this assigner representatives. 6) Each undersigned he identification that may	also to deem no grees to g any a obtain grees to on with similar grees to reexam athorize es to is ire international international grees to get a solution of the control o	execute all papers necessary in connection with any interference which mapplication or patents for the invention and to cooperate with the Assignee is evidence and going forward with such interference, execute all papers and documents and perform any act which may be claims or provisions of the International Convention for Protection of	ay in and nee,

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.

Invento	11'						
(Print c	iame)	House	Deore a				
Date		8 300	E 5018	Inventor Signature	Howard	Store	(SEAL)
Consu				y be signed before: (a) hen it should be signed			
Date	8	June	2016	Witness	Khul	afid-	K. Chuisto fidou
Date	8-	FUNE	2016	Witness	W. J. C	Slepp	W. T. CLEGG.

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

ASSIGNMENT

Hardy, Mark C

(1-8)	Insert Legal Name(s) of Inventor(s)		Stone, Howard J	
(1-0)			Jones , Nicholas G	
			Mignanelli, Paul M	
			ar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and veldged, each undersigned agrees to assign, and hereby does assign, transfer and set over to	d
(9)	Insert Name of Assi	gnee	ROLLS-ROYCE plc	
(10)	Insert Address of A	ssignee	62 Buckingham Gate, London, SW1E 6AT, Great Britain	
	for the United States of Amer provisional, non-provisional,	ica as def divisional) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interestined in 35 U.S.C. § 100, in the invention, and in all applications for patent including any and all continuation, international, confirmation, substitute and reissue application(s), and all Letters ination certificates that may be granted on the invention known as	st
(11)	Insert Identification	(11)	Ni-base Alloy for Structural Applications	
	such as Title, Case Number, or Foreign		5883 DWM	
	Application Number	(Atto	rney Docket No.)
(12)	Alternative	(12)	U.S. Application Number	
	Identification for			_
	filed applications	filed		
	for the invention and as the Assignee may c 2) Each undersigned as be declared concerning every way possible in 3) Each undersigned as necessary in connection Industrial Property or 4) Each undersigned as confirm by reissue or	also to deem ne grees to g any a obtain grees to on with grees to reexam	execute all papers necessary in connection with any interference which may pplication or patents for the invention and to cooperate with the Assignee in ng evidence and going forward with such interference, execute all papers and documents and perform any act which may be claims or provisions of the International Convention for Protection of	

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.

Invento	or					
(Print s	1ame) NIC+	10LAS	lones		11	
Date	<u>8tm</u>	Junie 2	2016	Inventor Signature	And the second	(SEAL)
Consu	This assignmed if outside the	ent should pre U.S.A. If ne	eferably be sither, then i	signed before; (a) t should be signed	a Notary Public if within th before at least two witness	e U.S.A. (b) a U.S. es who also sign here:
Date	8 June	2016		Witness	Chrtifich	K. CHRISTOFIDOU.
Date .	8 JUNE	2016		Witness	W. J. Clepp	W. J. CLEGG

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

ASSIGNMENT

			Hardy, Mark C	
(1.0)	Insert Legal Name(s	s) of	Stone, Howard J	
(1-8)	Inventor(s)		Jones , Nicholas G	
			Mignaneili, Paul M	
			ar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt a vledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to	and
(9)	Insert Name of Assi	gnee	ROLLS-ROYCE ple	
(10)	Insert Address of As	ssignee	62 Buckingham Gate, London, SW1E 6AT, Great Britain	
	for the United States of American provisional, non-provisional, of	ica as def divisional) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interfined in 35 U.S.C. § 100, in the invention, and in all applications for patent including any and all to continuation, international, confirmation, substitute and reissue application(s), and all Letters ination certificates that may be granted on the invention known as	rest
(11)	Insert Identification	(11)	Ni-base Alloy for Structural Applications	
	such as Title, Case Number, or Foreign Application Number	•	5883 DWM	
		(Atto	rney Docket No.)
(12)	Alternative	(12)	U.S. Application Number	
	Identification for			
	filed applications	filed		
	for the invention and as the Assignee may of 2) Each undersigned as be declared concerning every way possible in 3) Each undersigned as necessary in connection Industrial Property or 4) Each undersigned as confirm by reissue or 5) Each undersigned at other issuing authoritias Assignee of the entassigned, and that he agrees that this assign representatives. 6) Each undersigned he identification that may	also to deem no grees to g any a obtain grees to on with similar grees to reexamuthorized to is the interior interior is greey g y be ne-	execute all papers necessary in connection with any interference which may application or patents for the invention and to cooperate with the Assignee in ing evidence and going forward with such interference. execute all papers and documents and perform any act which may be claims or provisions of the International Convention for Protection of	y 1 nand ee,

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.

Inven	tor				
(Print	name) PAUL	MIGNANELI	Ll		
Date	8th	JUNE 2016	Inventor Signature	Myshadlo	(SEAL)
Cons				a Notary Public if within the d before at least two witnesses	
Date	8 June	2016	Witness	Chityse	K. CHRISTOFIDOCI
Date	8 JUNE	2016	Witness	W. J. Clepp	W. J. CLEGG.