#### 504196359 01/25/2017

# PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4243035

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Chaitanya PARUCHURI	01/17/2017
Philip JOSEPH	12/05/2016
Jae-Wook KIM	12/05/2016

#### **RECEIVING PARTY DATA**

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

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number		
Application Number:	15415498		

#### 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 JAMES A. OLIFF **Correspondent Name:** Address Line 1: **OLIFF PLC** 

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ATTORNEY DOCKET NUMBER:	174824
NAME OF SUBMITTER:	IFETAYO SIMMONS
SIGNATURE:	/ifetayo simmons/
DATE SIGNED:	01/25/2017

#### **Total Attachments: 4**

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> **PATENT** REEL: 041083 FRAME: 0418 504196359

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PATENT REEL: 041083 FRAME: 0419

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

### ASSIGNMENT

(1-8)	1-8) Insert Legal Name(s) of Inventor(s)		JOSEPH, Philip KIM, Jae-Wook		
	In consideration of the sum of sufficiency of which are hereb	f one dolla by acknow	ar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt ar redeged, each undersigned agrees to assign, and hereby does assign, transfer and set over to	nd	
(9)	Insert Name of Assi		ROLLS-ROYCE plc		
(10)	provisional, non-provisional, divisional, co		62 Buckingham Gate, London, SW1E 6AT, Great Britain		
			and Assignce's heirs, successors, assigns and legal representatives, the entire right, title and interested 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	est	
(11)	Insert Identification such as Title, Case	(11)	Aerofoil		
	Number, or Foreign		6053 JNR		
	Application Number	(Attor	ney Docket No. 174824	)	
(12)	Alternative Identification for	(12)	U.S. Application Number 15/415, 498		
	filed applications	filed	January 25, 2017		
	for the invention and a as the Assignee may d 2) Each undersigned ag be declared concerning every way possible in 3) Each undersigned ag necessary in connection Industrial Property or 34) Each undersigned ag confirm by reissue or 15) Each undersigned au other issuing authorities as Assignee of the entiassigned, and that he hagrees that this assignment representatives.  6) Each undersigned her identification that may	eem ne rees to g any aj obtaining rees to on with similar rees to reexamination to reexaminate to reexaminate to ree to issue to	execute all papers necessary in connection with any interference which may oplication or patents for the invention and to cooperate with the Assignee in ag 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	d.	

PATENT REEL: 041083 FRAME: 0420

#### (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 opposite the undersigned name.

Inven	for			
(Print	name) PARUCHURI, Chai	tanya	•	
Date	17 January 2017	Inventor Signature	- Only	(SEAL)
Cons	This assignment should preferably but if outside the U.S.A. If neither, there	e signed before: (a it should be sign	a) a Notary Public if within the U.S. ed before at least two witnesses who	A. (b) a U.S. o also sign here:
Date	17 January 2017	Witness	Man	ine Cannol
Date	18 January 2017	Witness	Geran Lagra-	GIOVANNI LACAGNIA

#### (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.

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

Invento	r				
(Print 1	iame)	JOSEPH, Ph	ilip	, /	
Date	05	/12 / 16	Inventor Signatu	re <u>f</u>	(SEAL)
Consul	This assig I if outside	gnment should pre the U.S.A. If nei	ferably be signed before: ther, then it should be sig	(a) a Notary Public if within the U.S.A. (b) and before at least two witnesses who also seems to be seems of the control of th	a U.S. sign here:
Date .	05/	12/16	Witness		
Date _	05/	12/16	Witness	A Per	

## (13) Declaration

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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 opposite the undersigned name.

Invent	or		
(Print	name) KIM, Jae-Wook		
Date	5 December 2016	Inventor Signature	(Joe Wook Jim (SEAL)
Const			a) a Notary Public if within the U.S.A. (b) a U.S. ed before at least two witnesses who also sign here:
Date	5 December 2016	Witness	RAFAEL PEREZ TORRO WWW
Date	5 December 2016	Witness	No Remio Peter

PATENT REEL: 041083 FRAME: 0423

**RECORDED: 01/25/2017**