

12/02/2013



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DEPARTMENT OF COMMERCE  
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Attorney Docket No. 159398

11-21-13

Please record the attached original document or copy thereof.

<p>1. A. Name of conveying parties:</p> <p>John David COULL Nicholas Robert ATKINS Howard Peter HODSON Adrian James WHITE</p> <p>B. Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. A. Name and address of receiving parties:</p> <p>ROLLS-ROYCE PLC 65 BUCKINGHAM GATE, LONDON SW1E 6AT, GREAT BRITAIN</p> <p>ROLLS-ROYCE DEUTSCHLAND LTD &amp; CO KG ESCHENWEG 11, OT, 15827 BLANKENFELDE-MAHLOW, DAHLEWITZ, GERMANY</p> <p>B. Additional name(s) &amp; address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. A. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____</p> <p>B. Execution Date: <u>[1] &amp; [2]: October 25, 2013;</u> <u>[3]: October 27, 2013 and</u> <u>[4]: October 31, 2013</u></p>	

4.  This document is being filed together with a new application.

A. Patent Application No.(s) 14/062,230

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached?  Yes  No

C. Title of Application: TURBINE BLADE

D.  This Assignment is submitted for a dual purpose: (1) recording in the assignment database; and (2) for use in the above-identified application as the oath or declaration pursuant to 37 CFR 1.63(c).

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>James A. Oliff</u></p> <p>Address: <u>OLIFF &amp; BERRIDGE, PLC</u> <u>P.O. Box 320850</u> <u>Alexandria, VA 22320-4850</u> <u>email@oliff.com</u></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00. <u>12/03/2013 KNGUYEN1 00000063 15046</u></p> <p>8. Credit any overpayment or charge any underpayment to deposit account number 15-0461.</p>
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9. Statement and signature.  
*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Todd M. Guise  
James A. Oliff, Registration No. 27,075  
Todd M. Guise, Registration No. 46,748

Date: November 21, 2013

Total number of pages including cover sheet, attachments, and document: 7

14062230

**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)	Insert Legal Name(s) of Inventor(s)	(1) <u>John David COULL</u>	(2) <u>Nicholas Robert ATKINS</u>
		(3) <u>Howard Peter HODSON</u>	(4) <u>Adrian James WHITE</u>
		(5) _____	(6) _____
		(7) _____	(8) _____

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 hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to

(9)	Insert Name of Assignee	(9&10) <u>ROLLS-ROYCE plc, 65 Buckingham Gate, London SW1E 6AT, Great Britain</u>
(10)	Insert Address of Assignee	(9&10) <u>ROLLS-ROYCE DEUTSCHLAND LTD &amp; CO KG, Eschenweg 11, OT, 15827 Blankenfelde-Mahlow, Dahlewitz, Germany</u>

(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 Number, or Foreign Application Number	(11) <u>Turbine Blade</u>
		(Attorney Docket No. <u>159398</u> )

(12)	Alternative Identification for filed applications	(12) U.S. Application Number <u>14/062,230</u>
		filed <u>October 24, 2013</u>

- 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, P.C. 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 25 Oct 2013 Inventor Signature John David Coull *John D. Coull* (SEAL)

Date 25 Oct 2013 Inventor Signature Nicholas Robert Atkins *Nicholas Robert Atkins* (SEAL)

Date \_\_\_\_\_ Inventor Signature Howard Peter Hodson (SEAL)

Date \_\_\_\_\_ Inventor Signature Adrian James White (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date 25-10-2013 Witness for John David Coull *M. Chilla* Martin Chilla

Date 25/10/2013 Witness for John David Coull *Anna Young* ANNA YOUNG

Date 25/10/2013 Witness for Nicholas Robert Atkins *William Playford* WILLIAM PLAYFORD

Date 25/10/2013 Witness for Nicholas Robert Atkins *Max Hewkin-Smith* Max Hewkin-Smith

Date \_\_\_\_\_ Witness for Howard Peter Hodson \_\_\_\_\_

Date \_\_\_\_\_ Witness for Howard Peter Hodson \_\_\_\_\_

Date \_\_\_\_\_ Witness for Adrian James White \_\_\_\_\_

Date \_\_\_\_\_ Witness for Adrian James White \_\_\_\_\_

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(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 Number, or Foreign Application Number	(11) <u>Turbine Blade</u>
		(Attorney Docket No. <u>159398</u> )

(12)	Alternative Identification for filed applications	(12) U.S. Application Number <u>14/062,230</u>
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- 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.
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**(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 John David Coull (SEAL)

Date \_\_\_\_\_ Inventor Signature Nicholas Robert Atkins (SEAL)

Date 27<sup>th</sup> October 2013 Inventor Signature Howard Peter Hodson (SEAL)

Date \_\_\_\_\_ Inventor Signature Adrian James White (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

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Date \_\_\_\_\_ Witness for John David Coull \_\_\_\_\_

Date \_\_\_\_\_ Witness for John David Coull \_\_\_\_\_

Date \_\_\_\_\_ Witness for Nicholas Robert Atkins \_\_\_\_\_

Date \_\_\_\_\_ Witness for Nicholas Robert Atkins \_\_\_\_\_

Date 27<sup>th</sup> October 2013 Witness for Howard Peter Hodson [Signature]

Date 27<sup>th</sup> October 2013 Witness for Howard Peter Hodson \_\_\_\_\_

Date \_\_\_\_\_ Witness for Adrian James White \_\_\_\_\_

Date \_\_\_\_\_ Witness for Adrian James White \_\_\_\_\_

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Date \_\_\_\_\_ Inventor Signature John David Coull (SEAL)

Date \_\_\_\_\_ Inventor Signature Nicholas Robert Atkins (SEAL)

Date \_\_\_\_\_ Inventor Signature Howard Peter Hodson (SEAL)

Date 31st October 2013 Inventor Signature Adrian James White *Adrian James White*

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

Date \_\_\_\_\_ Inventor Signature \_\_\_\_\_ (SEAL)

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Date \_\_\_\_\_ Witness for Nicholas Robert Atkins \_\_\_\_\_

Date \_\_\_\_\_ Witness for Nicholas Robert Atkins \_\_\_\_\_

Date \_\_\_\_\_ Witness for Howard Peter Hodson \_\_\_\_\_

Date \_\_\_\_\_ Witness for Howard Peter Hodson \_\_\_\_\_

Date 31st October 2013 Witness for Adrian James White *J. Vize* (JENNIFER VIZE)

Date 31st October 2013 Witness for Adrian James White *Boye* (Patrick Vize)

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