PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KONG MA	10/24/2014
ROBERT MORIARTY	09/09/2014

RECEIVING PARTY DATA

Name:	ROLLS-ROYCE CORPORATION	
Street Address:	450 S. MERIDIAN STREET	
City:	INDIANAPOLIS	
State/Country:	MINNESOTA	
Postal Code:	46225-1103	

PROPERTY NUMBERS Total: 13

Property Type	Number
Application Number:	61451005
Application Number:	13416315
Application Number:	61450963
Application Number:	13416770
Application Number:	61451035
Application Number:	13416610
Application Number:	61450973
Application Number:	13416705
PCT Number:	US2012028462
PCT Number:	US2012028363
PCT Number:	US2012028543
PCT Number:	US2012028509
PCT Number:	US2012028523

CORRESPONDENCE DATA

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> **PATENT** REEL: 035636 FRAME: 0762

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Correspondent Name: SHUMAKER & SIEFFERT, P.A.

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ATTORNEY DOCKET NUMBER:	1106-92/97/100/101	
NAME OF SUBMITTER:	NANCY J. BURR	
SIGNATURE:	/Nancy J. Burr/	
DATE SIGNED:	05/14/2015	

Total Attachments: 6

source=2015_05_14_RCA10733_RCA10853_RCA10854_RCA10855_US_Assignment#page1.tif source=2015_05_14_RCA10733_RCA10853_RCA10854_RCA10855_US_Assignment#page2.tif source=2015_05_14_RCA10733_RCA10853_RCA10854_RCA10855_US_Assignment#page3.tif source=2015_05_14_RCA10733_RCA10853_RCA10854_RCA10855_US_Assignment#page4.tif source=2015_05_14_RCA10733_RCA10853_RCA10854_RCA10855_US_Assignment#page5.tif source=2015_05_14_RCA10733_RCA10853_RCA10854_RCA10855_US_Assignment#page6.tif

<u>ASSIGNMENT</u>

For valuable consideration, we, Kong Ma of 14251 Stacey St., Carmel, IN 46033; and Robert Moriarty of 4571 Osprey Drive, Greenwood, IN 46143; hereby assign to: Rolls-Royce Corporation, having a place of business at: 450 S. Meridian Street, Indianapolis, IN 46225-1103 and its successors and assigns (collectively hereinafter called "the Assignee") the entire right, title and interest throughout the world in the inventions and improvements which are the subject of applications for United States Patents signed by us, set forth in the attached Appendix A. This assignment includes said applications, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), any provisional, continuation, continuation-in-part, divisional, reissue, renewal, extension or other application for any of said inventions or improvements, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. We authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Attorney Docket Nos.: 1106-092/RCA10733; 1106-097/RCA10853;

1106-100/RCA10854; 1106-101/RCA10855

ASSIGNMENT APPENDIX A

1. (1106-092/RCA10733)

Title: INTELLIGENT AIRFOIL COMPONENT SURFACE IMAGING INSPECTION

Filed March 09, 2011, and assigned U.S. Serial Number 61/451,005

Filed March 09, 2012, and assigned U.S. Serial Number 13/416,315

Filed March 09, 2012, and assigned International Serial Number PCT/US2012/028462

Filed March 09, 2012, and assigned International Serial Number PCT/US2012/028363

2. (1106-097/RCA10853)

Title: ILLUMINATION SYSTEM WITH ILLUMINATION SHIELD

Filed March 09, 2011, and assigned U.S. Serial Number 61/450,963

Filed March 09, 2012, and assigned U.S. Serial Number 13/416,770

Filed March 09, 2012, and assigned International Serial Number PCT/US2012/028543

3. (1106-100/RCA10854)

Title: PROTOCOL-BASED INSPECTION SYSTEM

Filed March 09, 2011, and assigned U.S. Serial Number 61/451,035

Filed March 09, 2012, and assigned U.S. Serial Number 13/416,610

Filed March 09, 2012, and assigned International Serial Number PCT/US2012/028509

4. (1106-101/RCA10855)

Title: AUTOMATED OBJECT MANIPULATION SYSTEM

Filed March 09, 2011, and assigned U.S. Serial Number 61/450,973

Filed March 09, 2012, and assigned U.S. Serial Number 13/416,705

Filed March 09, 2012, and assigned International Serial Number PCT/US2012/028523

<u>ASSIGNMENT</u>

For valuable consideration, we, Kong Ma of 14251 Stacey St., Carmel, IN 46033; and Robert Moriarty of 4571 Osprey Drive, Greenwood, IN 46143; hereby assign to: Rolls-Royce Corporation, having a place of business at: 450 S. Meridian Street, Indianapolis, IN 46225-1103 and its successors and assigns (collectively hereinafter called "the Assignee") the entire right, title and interest throughout the world in the inventions and improvements which are the subject of applications for United States Patents signed by us, set forth in the attached Appendix A. This assignment includes said applications, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), any provisional, continuation, continuation-in-part, divisional, reissue, renewal, extension or other application for any of said inventions or improvements, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. We authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Attorney Docket Nos.: 1106-092/RCA10733; 1106-097/RCA10855

Date: Robert Moriarty

State of Indiana) ss:

County of Moriard) ss:

On this day of least Moriarty Public, personally appeared Robert Moriarty personally known to me (or proved to the on the bask of satisfactory evidence) to be the person(s) whose name is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument the mistrument the person of the instrument of the instr

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RECORDED: 05/14/2015

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Filed March 09, 2012, and assigned U.S. Serial Number 13/416,705

Filed March 09, 2012, and assigned International Serial Number PCT/US2012/028523