

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3681894

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
QUINLAN YEE SHUCK	01/31/2015
KONG MA	04/07/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ROLLS-ROYCE CORPORATION
<b>Street Address:</b>	450 S. MERIDIAN STREET
<b>City:</b>	INDIANAPOLIS
<b>State/Country:</b>	INDIANA
<b>Postal Code:</b>	46225-1103
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14988368
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(651)735-1102
<i>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.</i>	
<b>Phone:</b>	651-735-1100
<b>Email:</b>	pairedocketing@ssiplaw.com
<b>Correspondent Name:</b>	SHUMAKER & SIEFFERT, P.A. ROLLS-ROYCE CO
<b>Address Line 1:</b>	1625 RADIO DRIVE
<b>Address Line 2:</b>	SUITE 300
<b>Address Line 4:</b>	WOODBURY, MINNESOTA 55125
<b>ATTORNEY DOCKET NUMBER:</b>	1106-116US01/RCA11321
<b>NAME OF SUBMITTER:</b>	NANCY J. BURR
<b>SIGNATURE:</b>	/Nancy J. Burr/
<b>DATE SIGNED:</b>	01/05/2016
<b>Total Attachments: 4</b>	
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ASSIGNMENT

For valuable consideration, we, Quinlan Yee Shuck of 4835 East 71st Street, Indianapolis, IN 46220, and Kong Ma of 14251 Stacey St., Carmel, IN 46033 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 an application for United States Patent signed by us, entitled NEURO-FUZZY LOGIC FOR CONTROLLING MATERIAL ADDITION PROCESSES, filed January 5, 2016, and assigned U.S. Serial Number 14/988,368; this assignment including said application, any provisional, non-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 and 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. We hereby authorize Rolls-Royce Corporation, its employees, and its legal representatives to fill in the serial number and filing date above after this document has been executed.

RCA11321

Date: Jan. 31, 2015

Quinlan Yee Shuck  
Quinlan Yee Shuck

State of Indiana )  
                                  ) ss:  
County of Marion )

On this 31 day of January, 2015, before me, Ginger Rezy,  
Notary Public, personally appeared Quinlan Yee Shuck personally known to me (or proved to me on the  
basis 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.

WITNESS my hand and official seal.



Ginger Rezy  
Signature of Notary Public:  
My Commission Expires:

ASSIGNMENT

For valuable consideration, we, Quinlan Yee Shuck of 4835 East 71st Street, Indianapolis, IN 46220, and Kong Ma of 14251 Stacey St., Carmel, IN 46033 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 an application for United States Patent signed by us, entitled NEURO-FUZZY LOGIC FOR CONTROLLING MATERIAL ADDITION PROCESSES, filed January 5, 2016, and assigned U.S. Serial Number 14/988,368; this assignment including said application, any provisional, non-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 and 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. We hereby authorize Rolls-Royce Corporation, its employees, and its legal representatives to fill in the serial number and filing date above after this document has been executed.

1106-116USP1/1106-116US01 - Assignment

Date: APR 7, 2015

Kong Ma

Kong Ma

RCA11321