502552172 10/30/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2597765

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
DAVID ROCKWELL	10/29/2013	
VLADIMIR SHKUNOV	10/29/2013	

RECEIVING PARTY DATA

Name:	RAYTHEON COMPANY
Street Address:	870 WINTER STREET
City:	WALTHAM
State/Country:	MASSACHUSETTS
Postal Code:	02451-1449

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14067751	

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	RAYN01-34767
NAME OF SUBMITTER:	RYAN S. LOVELESS
Signature:	/Ryan S. Loveless/
Date:	10/30/2013
	DATENT

PATENT 502552172 REEL: 031513 FRAME: 0959

14067751

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	This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 4 source=AssignmentandDeclaration#page1.tif		
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PATENT REEL: 031513 FRAME: 0960

ASSIGNMENT and DECLARATION

I/we, the und	dersigned, David R	lockwell and	Vladimir Shku	nov ("Assign	or(s)"),
have made certain	inventions or disco	veries (or bot	h) set forth in	a patent app	lication
entitled, High-Powe	er Raman Beam-(Combining Ar	chitecture Pro	oducing High	Beam
Quality in a Multir	node Optical Fibe	r, identified	as Attorney L	Docket No. 1	3-4767
(RAYN01-34767),	which application	was filed	on	and as	signed
Application No	In the	event that the	e execution da	ite, filing date	and/or
Application No. are	not entered or are	incorrect at	the time Assig	nor(s) execut	ed this
document, Assignor	(s) hereby authoriz	e and reques	t an attorney	of Assignee to	insert
the information or m	ake the correction.	mang mang penaggah Bibil penag Panggahan	and professional and the second section of the second section of the second section of the second section of t	lander programme in de la companya di sua di salah di sa Salah di salah di sa	

RAYTHEON COMPANY is a Delaware Corporation having a place of business at 870 Winter Street, Waltham, MA 02451-1449, and which, together with its successors and assigns ("**Assignee**"), is desirous of acquiring the title, rights, benefits and privileges hereinafter recited.

For valuable consideration furnished by Assignee to Assignor(s), receipt and sufficiency of which Assignor(s) hereby acknowledge, Assignor(s) hereby, without reservation:

- 1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said application, any and all other patent applications (including without limitation utility models, provisionals, designs, plants and any other such intellectual property) on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, reissue, reexamination and convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent and any provisional applications from which priority is claimed in said patent applications and said Letters Patent and all rights to claim or sue for prior damages;
- 2. Authorize Assignee to file said patent applications in any or all countries on any or all of said inventions and discoveries in the name of Assignee or otherwise as Assignee may deem advisable, under any international conventions, international treaties, or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;

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- 4. Confirm that Assignor(s) have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and
- 5. Bind heirs, legal representatives and assigns of Assignor(s), as well as Assignor(s), to do, upon Assignee's request, all acts reasonable to assure that said inventions and discoveries, said patent applications and said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by Assignor(s) or heirs, legal representatives and assigns of Assignor(s) if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to Assignor(s) relating to said inventions and discoveries or the history thereof; and to furnish Assignee, upon request, with any and all relevant documents, photographs, models, samples and other physical exhibits in control of Assignor(s) or in the control of heirs, legal representatives or assigns of Assignor(s).

Assignor(s) accept the terms of this Assignment as indicated by their signature below.

Further, each Assignor individually, as a named inventor, hereby declares:

- a) The above-identified application was made or authorized to be made by me;
- b) I believe I am the original inventor or an original joint inventor of a claimed invention in the above-identified application; and
- c) I hereby acknowledge that any willful false statement made in this declaration is punishable under § 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) years, or both.

Each Assignor individually, as a named inventor, also states:

I have reviewed and understand the contents of the above-identified application.

I acknowledge the duty to disclose to the United States Patent Office all information known to me to be material to the patentability of the above-identified application.

[Signatures on following pages]

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PATENT ASSIGNMENT and DECLARATION Attorney Docket No. 13-4767 (RAYN01-34767)

Accepted by:	기 : 10 기 기 : 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Dated: 10/29/13	David Rockwell
Witnessed by:	
Dated: 10/29/2013	- food a flull
	GA Den
Dated: 10/29/2013	410M

PATENT ASSIGNMENT and DECLARATION Attorney Docket No. 13-4767 (RAYN01-34767)

Accepted by:	$\bigcap_{A \in A}$
Dated: 10/29/13	Med
	Vladimir Shkunov
Witnessed by:	
Dated: 10/29/2013	Saw a Hall
Dated: 10/49/4013	a 2 h
Dated: 10/09/1013	WUM