504777214 02/14/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4823943

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT		
NATURE OF CONVEYANCE:	Corrective Assignment to correct the SECOND ASSIGNORS NAME previously recorded on Reel 044556 Frame 0024. Assignor(s) hereby confirms the CORRECT NAME IS: ARUNESH GOSWAMI.		

CONVEYING PARTY DATA

Name	Execution Date
MOHAMMAD ALI KHATIBZADEH	01/05/2018
ARUNESH GOSWAMI	01/05/2018

RECEIVING PARTY DATA

Name:	LUMEOVA, INC.
Street Address:	1017 MAIN CAMPUS DRIVE, SUITE 2300
City:	RALEIGH
State/Country:	NORTH CAROLINA
Postal Code:	27606

PROPERTY NUMBERS Total: 7

Property Type	Number
Application Number:	15858887
Application Number:	15858905
Application Number:	15858925
Application Number:	15858944
Application Number:	15862959
Application Number:	62293291
PCT Number:	US1716916

CORRESPONDENCE DATA

Fax Number: (919)882-8195

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: 9193482194

Email:docket@nkpatentlaw.comCorrespondent Name:NK PATENT LAW, PLLC

Address Line 1: 4917 WATERS EDGE DRIVE, SUITE 275
Address Line 4: RALEIGH, NORTH CAROLINA 27606

ATTORNEY DOCKET NUMBER: 580/3/2-580/3/6 UTIL

NAME OF SUBMITTER: GREGORY MORGAN EVANS

PATENT REEL: 045337 FRAME: 0257

504777214

SIGNATURE:	/Gregory Morgan Evans/	
DATE SIGNED: 02/14/2018		
	This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 7		
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source=580-3-3UTIL-20180109-Assignment-RecNotice-Binder#page1.tif source=580-3-3UTIL-20180109-Assignment-RecNotice-Binder#page2.tif source=580-3-3UTIL-20180109-Assignment-RecNotice-Binder#page3.tif source=580-3-3UTIL-20180109-Assignment-RecNotice-Binder#page4.tif source=580-3-3UTIL-20180109-Assignment-RecNotice-Binder#page5.tif source=580-3-3UTIL-20180109-Assignment-RecNotice-Binder#page6.tif source=580-3-3UTIL-20180109-Assignment-RecNotice-Binder#page7.tif

PATENT REEL: 045337 FRAME: 0258

504717152 01/08/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4763874

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MOHAMMAD ALI KHATIBZADEH	01/05/2018
ARUNESH GOWAMI	01/05/2018

RECEIVING PARTY DATA

Name:	LUMEOVA, INC.
Street Address:	1017 MAIN CAMPUS DRIVE, SUITE 2300
City:	RALEIGH
State/Country:	NORTH CAROLINA
Postal Code:	27606

PROPERTY NUMBERS Total: 7

Property Type	Number
Application Number:	62293291
Application Number:	15858887
Application Number:	15858907
Application Number:	15858925
Application Number:	15858944
PCT Number:	US1716916
Application Number:	15862959

CORRESPONDENCE DATA

Fax Number: (919)882-8195

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Phone: 9193482194

Email:docket@nkpatentlaw.comCorrespondent Name:NK PATENT LAW, PLLC

Address Line 1:4917 WATERS EDGE DRIVE, SUITE 275Address Line 4:RALEIGH, NORTH CAROLINA 27606

ATTORNEY DOCKET NUMBER:	580/3/2-580/3/6 UTIL
NAME OF SUBMITTER:	GREGORY MORGAN EVANS
SIGNATURE:	/Gregory Morgan Evans/

PATENT REEL: 045337 FRAME: 0259

DECLARATION AND ASSIGNMENT OF RIGHTS

As a below named inventor (hereinafter designated as the undersigned or the Assignor, where appropriate), I hereby declare that:

The application is as identified by the attorney docket number, title, Filing Date, or Application Title as set forth in the following Table I.

The application in Table I was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the applications in Table I.

The undersigned hereby acknowledges 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.

WHEREAS, the undersigned, Mohammad Ali Khatibzadeh and Arunesh Goswami, (hereinafter "Assignor") has invented certain new and useful improvements described in the application(s) identified in Table I.

AND, WHEREAS, Lumeova, Inc., having a place of business at 1017 Main Campus Drive, Suite 2300, Raleigh, NC 27606, (hereinafter "Assignee"), has already acquired an interest in the application(s) identified in Table I by and through an employment or other agreement between Assignor and Assignee. I further authorize an agent of the Assignee to insert the filing date, application number, and any other identifying particulars as required for perfecting these assignment papers.

However, in the avoidance of doubt and as confirmation of the already acquired interest by Assignee, NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor has assigned and by these presents does hereby sell, assign, transfer, and convey unto the Assignee, its successors and assigns, his entire right, title, and interest in and to the invention and application, including the right to sue for past infringements and any other prior occurring rights, provided any such rights exist, and in and to any and all domestic and foreign patent applications filed on the invention, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America, and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with his right to claim the priority of said application in all foreign countries in accordance with the International

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580/3/2 -580/3/6 UTIL

Convention, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and

entirely as the same would have been held and enjoyed by Assignor if this assignment and sale had not

been made. Assignor further assigns to Assignee the right to claim entitlement and/or priority to any

applications that entitlement or priority may be claimed for this or any later filed application, including

the assignment of any provisionals or other priority documents to which the inventions claim priority to.

The assignment of the right to claim entitlement and/or priority is executed nunc pro tunc and is

considered effective as of the filing date of the earliest application to which priority and/or entitlement is

claimed.

Assignor hereby requests that said Letters Patent be issued in accordance with this assignment.

Assignor further covenants and agrees that, at the time of the execution and delivery of these

presents, Assignor possesses full title to the invention and application above-mentioned, and that he has

the unencumbered right and authority to make this assignment.

Assignor further covenants and agrees, and likewise binds his heirs, legal representatives and

assigns, to promptly communicate to said Assignee or its representatives any facts known to him relating

to said invention, to testify in any interference or legal proceedings involving said invention, to execute

any additional papers which may be requested to confirm the right of the Assignee, its representatives,

successors and assigns to secure patent or similar protection for the said invention in all countries and to

vest in the Assignee complete title to the said invention and Letters Patent, without further compensation,

but at the expense of said Assignee, its successors, assigns and other legal representatives.

<<<<<<

TABLE I and Signature Page follows

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TABLE I

Application No.	Attorney Docket No.	Filing Date	Title
62/293,291	580/3 PROV	02-09-2016	ULTRA-WIDEBAND, WIRELESS
			OPTICAL HIGH SPEED
			COMMUNICATION DEVICES AND
			SYSTEMS
PCT/US17/16916	580/3 PCT	02-08-2017	ULTRA-WIDEBAND, WIRELESS
	-		OPTICAL HIGH SPEED
			COMMUNICATION DEVICES AND
	**************************************		SYSTEMS
15/858,887	580/3/2 UTIL	12-29-2017	ULTRA-WIDEBAND LIGHT
			EMITTING DIODE AND OPTICAL
			DETECTOR COMPRISING INDIUM
			GALLIUM ARSENIDE PHOSPHIDE
			AND METHOD OF FABRICATING
The substitute was a substitute of the substitut			THE SAME
15/858,905	580/3/4 UTIL	12-29-2017	ULTRA-WIDEBAND LIGHT
			EMITTING DIODE AND OPTICAL
			DETECTOR COMPRISING
			ALUMINUM GALLIUM ARSENIDE
			AND METHOD OF FABRICATING
			THE SAME
15/858,925	580/3/5 UTIL	12-29-2017	ULTRA-WIDEBAND LIGHT
			EMITTING DIODE AND OPTICAL
			DETECTOR COMPRISING
			ALUMINUM INDIUM GALLIUM
			NITRIDE AND METHOD OF
			FABRICATING THE SAME
15/858,944	580/3/6 UTIL	12-29-2017	ULTRA-WIDEBAND LIGHT
			EMITTING DIODE AND OPTICAL
			DETECTOR COMPRISING
			ALUMINUM GALLIUM
			ANTIMONIDE AND METHOD OF
***************************************			FABRICATING THE SAME

Executed this 5 hay of January 2018

Mohammad Ali Khatibzadeh

AGosarami	
Arunesh Goswami	MINISTER OF THE PROPERTY OF TH
(Assignors)	

Executed this 5th day of January, 2018 LUMEOVA, INC.

Name: MOHAMMAD ALI KHATIBZADEH

Title: PRESIDENT & CEO

(Assignee)