505810775 12/09/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date		
TIMOTHY WAYNE MASSE	11/27/2019		
JOHN LYNN COOPER	11/27/2019		
TRAVIS DUANE EWERT	12/02/2019		
FRANCIS SANTITORO	12/02/2019		
MICHAEL LEDDY	12/02/2019		
JAMES FARACI	11/27/2019		

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16707734

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SIGNATURE:	/Joseph E. Mutschelknaus, #63,285/
DATE SIGNED:	12/09/2019

PATENT 505810775 REEL: 051220 FRAME: 0409

Total Attachments: 4

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COMBINED DECLARATION AND ASSIGNMENT

DECLARATION

As the below named inventors, I hereby declare that:

This d	leclaration is directed to:
\boxtimes	The attached application, or
	United States application or PCT international application number
	filed on

The above-identified application 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 application.

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.

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the below named inventors, each of the below named inventors, hereby sell and assign to **LightRiver Technologies**, Inc., a corporation formed under the laws of Delaware, whose mailing address is 2150 John Glenn Drive, Suite 200, Concord, CA 94520, US (hereafter referred to as the Assignee), his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

- (a) in the invention(s) known as PROACTIVE AND REACTIVE AUTOMATED FAULT IDENTIFICATION AND ISOLATION IN AN OPTICAL TRANSPORT NETWORK, AND APPLICATIONS THEREOF for which application(s) for patent in the United States of America is identified above, in any and all applications thereon, in any and all Letters Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application identified above in part (a), including non-provisional applications, continuing (continuation, divisional, or continuation-in-part) applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

PATENT REEL: 051220 FRAME: 0411 (c) in any and all inventions described in the patent application identified above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The below named inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The below named inventors agree to execute all papers necessary in connection with any patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such patent enforcement action.

The below named inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The below named inventors hereby represent that he/she understands that the patent practitioners associated with CUSTOMER NUMBER 26111 are the legal representatives of, and attorneys for, the assignee, and are <u>NOT</u> the legal representatives of, and attorneys for, the inventors.

MENTION MORRE.
LEGAL NAME OF INVENTOR
Inventor: Timothy Wayne Masse Date: 11-27-2019
Signature of Inventor: Juftham
LEGAL NAME OF INVENTOR
Inventor: John Lynn Cooper Date: 11-27-2019
Signature of Inventor:
LEGAL NAME OF INVENTOR
Inventor: Travis Duane Ewert Date: 17-7-20/9
Signature of Inventor:
LEGAL NAME OF INVENTOR
Inventor: Francis Santitoro Date: 12-2-2019
Signature of Inventor: Francia Santitoro
LEGAL NAME OF INVENTOR
Inventor: Michael Leddy Date: 12/2/19
Signature of Inventor: Michael Leddy
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IN WITNESS WHEREOF, executed by the below named inventors on the date opposite

LEGAL NAME OF INVENTOR		,,,,	1	À	Name of the last	-	*******		
Inventor: James Faraci	Date:	e e e e e e e e e e e e e e e e e e e		%	<u> </u>		*********		20000
Signature of Inventor:		·		······································	gygginja ajama mija majabi		months in the Control of the Control	***************************************	
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