### 504291846 03/27/2017

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
QUNBI ZHUGE	03/17/2017
MAURICE O'SULLIVAN	03/17/2017
MICHAEL ANDREW REIMER	03/17/2017

#### **RECEIVING PARTY DATA**

Name:	CIENA CORPORATION
Street Address:	7035 RIDGE ROAD
City:	HANOVER
State/Country:	MARYLAND
Postal Code:	21076

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	15461718	

#### **CORRESPONDENCE DATA**

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

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**Phone:** 416-630-0071

Email: uspto@integralip.com

Correspondent Name: INTEGRAL INTELLECTUAL PROPERTY INC.

**Address Line 1:** 4400 BATHURST STREET, SUITE 10

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ATTORNEY DOCKET NUMBER:	C10.2456
NAME OF SUBMITTER:	ALYSON KENT
SIGNATURE:	/Alyson Kent/
DATE SIGNED:	03/27/2017

**Total Attachments: 1** 

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PATENT 504291846 REEL: 041754 FRAME: 0229

Attorney Docket No.: C10.2456 PATENT

## ASSIGNMENT

WHEREAS, Qunbi ZHUGE, Maurice O'SULLIVAN, and Michael Andrew REIMER (hereinafter referred to as "ASSIGNORS") have invented certain new and useful improvements in an invention entitled:

#### Fiber Kerr Nonlinear Noise Estimation

for which an application for a United States patent is being submitted to the United States Patent and Trademark Office herewith; and

WHEREAS, Ciena Corporation, 7035 Ridge Road, Hanover, MD 21076 USA (hereinafter referred to as "ASSIGNEE") is desirous of acquiring the entire right, title, and interest in and to said invention, and in and to said application and any Letters Patent that may issue thereon:

NOW, THEREFORE, in accordance with obligations entered into pursuant to an Employment Agreement or other agreement and/or for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNORS hereby sell, transfer and assign to said ASSIGNEE, and to ASSIGNEE'S successors and assigns, ASSIGNORS' entire right, title, and interest in and to said invention and improvements invented and originated by ASSIGNORS in the United States and its territorial possessions and in any and all foreign countries and to all Letters Patent or similar legal protections in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any application claiming priority to/from the application, or any continuation, division, continuation-in-part, reexamination, renewal, substitute, extension, or reissue thereof or any legal equivalent thereof in a foreign country for the full term(s) for which the same may be granted; and authorize and request the Commissioner for Patents of the United States and any official of any foreign country whose duty it is to issue patents or legal equivalents thereof, to issue same for this invention to ASSIGNEE, its lawful successors and assigns.

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention, said application, and said Letters Patent and legal equivalents thereof in foreign countries as may be known and accessible to ASSIGNORS and will testify as to the same in any administrative proceeding or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments, or affidavits required to apply for, obtain, maintain, issue, and/or enforce said invention, said application, and said Letters Patent and legal equivalents thereof in foreign countries which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, we have hereunto set hand and signed on the date indicated below:

	Date:	March 17, 2017
Quńbi ZHUĞE		
九名の一	Date:	March 17, 2017
Maurice O'SULLIVAN		The state of the s
	Date:	
Michael Andrew REIMER		The state of the s

PATENT REEL: 041754 FRAME: 0230