503053979 11/10/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3100579

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GERARD L. SWINKELS	11/10/2014
DAVID W. BOERTJES	11/07/2014
DAVID MIEDEMA	11/06/2014
KIM B. ROBERTS	11/07/2014

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:	14536792

CORRESPONDENCE DATA

Fax Number: (704)366-9744

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.

7047903600 Phone:

Email: nduer@worldpatents.com **Correspondent Name: CLEMENTS BERNARD PLLC** Address Line 1: 1901 ROXBOROUGH RD.

Address Line 2: SUITE 250

Address Line 4: CHARLOTTE, NORTH CAROLINA 28211

ATTORNEY DOCKET NUMBER:	10.2210A
NAME OF SUBMITTER:	CHRISTOPHER L. BERNARD
SIGNATURE:	/Christopher L. Bernard/
DATE SIGNED:	11/10/2014

Total Attachments: 4

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> **PATENT** REEL: 034133 FRAME: 0421 503053979

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> PATENT REEL: 034133 FRAME: 0422

Attorney Docket No.: 10.2210A PATENT

ASSIGNMENT

WHEREAS, Gerard L. SWINKELS, David W. BOERTJES, David MIEDEMA, and Kim B. ROBERTS (hereinafter referred to as "ASSIGNORS") have invented certain new and useful improvements in an invention entitled:

MARGIN-BASED OPTIMIZATION SYSTEMS AND METHODS IN OPTICAL NETWORKS FOR CAPACITY BOOSTING

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:

Swinkels (Nov 10, 2014)	Date: Nov 10, 2014
Gerard L. SWINKELS	
	Date:
David W. BOERTJES	
	Date:
David MIEDEMA	
	Date:
Kim R PORFRTS	

1

Attorney Docket No.: 10.2210A PATENT

ASSIGNMENT

WHEREAS, Gerard L. SWINKELS, David W. BOERTJES, David MIEDEMA, and Kim B. ROBERTS (hereinafter referred to as "ASSIGNORS") have invented certain new and useful improvements in an invention entitled:

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

	Date:
Gerard L. SWINKELS	
David W. Boerljes (Nov 7, 2014)	Date: Nov 7, 2014
David W. BOERTJES	·
	Date:
David MIEDEMA	
	Date:
Kim B. ROBERTS	•

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Attorney Docket No.: 10.2210A PATENT

ASSIGNMENT

WHEREAS, Gerard L. SWINKELS, David W. BOERTJES, David MIEDEMA, and Kim B. ROBERTS (hereinafter referred to as "ASSIGNORS") have invented certain new and useful improvements in an invention entitled:

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

	Date:
Gerard L. SWINKELS	
	Date:
David W. BOERTJES	
Da Simedema (Nov 6, 2014)	Date: Nov 6, 2014
David MIEDEMA	
	Date:
Kim B ROBERTS	

PATENT REEL: 034133 FRAME: 0425

ASSIGNMENT

WHEREAS, Gerard L. SWINKELS, David W. BOERTJES, David MIEDEMA, and Kim B. ROBERTS (hereinafter referred to as "ASSIGNORS") have invented certain new and useful improvements in an invention entitled:

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

	Date:
Gerard L. SWINKELS	
	Date:
David W. BOERTJES	
	Date:
David MIEDEMA	
(im B R Der (MQ) 7, 2014)	Date: Nov 7, 2014
Vim P DORFDTS	

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REEL: 034133 FRAME: 0426