

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT3929829

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	CIENA CANADA, INC.	05/05/2016
RECEIVING PARTY DATA		
Name:	CIENA CORPORATION	
Street Address:	7035 RIDGE ROAD	
City:	HANOVER	
State/Country:	MARYLAND	
Postal Code:	21076-1426	
PROPERTY NUMBERS Total: 1		
Property Type	Number	
Application Number:	14793114	
CORRESPONDENCE DATA		
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ATTORNEY DOCKET NUMBER:	18311/038002	
NAME OF SUBMITTER:	KATE OHALE	
SIGNATURE:	/Robert P. Lord/	
DATE SIGNED:	06/22/2016	
Total Attachments: 6		
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source=Assignment Ciena Canada to US#page3.tif		
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ASSIGNMENT

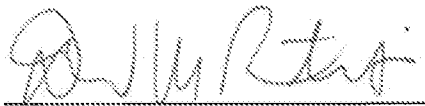
WHEREAS, Ciena Canada, Inc., a Canadian corporation (the "Assignor"), is the owner of the entire right, title, and interest, worldwide, in and to the patents and patent applications listed on Schedule A-1, attached hereto, together with said patent application, all provisionals, divisions, continuations, continuations-in-part, reissues, reexaminations, extensions, all foreign counterparts thereof, and all Letters Patent (domestic and foreign) which may be granted therefor; and

WHEREAS, Ciena Corporation (the "Assignee"), a United States corporation, whose business address is 7035 Ridge Road; Hanover, Maryland 21076-1426, is desirous of acquiring the entire right, title and interest, worldwide, in and to the aforesaid patents and patent applications listed on Schedule A-1 together with said patent application, all provisionals, divisions, continuations, continuations-in-part, reissues, reexaminations, extensions, all foreign counterparts thereof, and all Letters Patent (domestic and foreign), inventor's certificates and other rights thereon granted in the United States and foreign countries that may be granted therefor;

NOW, THEREFORE, for good and valuable consideration paid to the Assignor, by the Assignee, the receipt of which is hereby acknowledged, the Assignor hereby assigns, transfers, and sets over to the Assignee, all right, title, and interest in and to aforesaid patents and patent applications listed on Schedule A-1 together with said patent application, all provisionals, divisions, continuations, continuations-in-part, reissues, reexaminations, extensions, and foreign counterparts thereof, and all Letters Patent (domestic and foreign), inventor's certificates and other rights thereon granted in the United States and foreign countries that may be granted therefor, the same to be held and enjoyed by the Assignee, and for the use and benefit of its successors, assigns, or other legal representatives, to the end of the term for which aforesaid patents and patent applications listed on Schedule A-1, together with said patent application, all provisionals, divisions, continuations, continuations-in-part, reissues, reexaminations, extensions, all foreign counterparts thereof, and all Letters Patent (domestic and foreign) which may be granted therefor would have been held and enjoyed by the Assignor if this assignment, transfer, and sale had not been made.

Executed this 5th day of May, in the year 2016, at Hanover, Maryland.

Ciena Canada, Inc.

By: 

David M. Rothenstein

Senior Vice President & Corporate Secretary

Ciena Corporation

By: 

Robert D. Kucler

Vice President & Head of Intellectual Property

PATENT

REEL: 038983 FRAME: 0310

Schedule A-1

ROBIC

TERAXION INC.
Client : 000634

TeraXion patent portfolio as of December 28, 2015

27- Title	METHOD AND APPARATUS FOR MEASURING A FACTOR CHARACTERIZING A BALANCED DETECTION DEVICE						
Inventor(s):	PAINCHAUD, YVES & POULIN, MICHEL & MORIN, MICHEL						
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)
0145 ACTIVE	UNITED STATES	12/016,137	29-10-2010	8,129,612/26 29-10-2008	TERAXION INC.	29-03-2013 8,408,521	REDACTED

29- Title	FIBER COUPLING TECHNIQUE ON A WAVEGUIDE						
Inventor(s):	PELLETIER, FRANÇOIS & ROBIDOUX, GUILLAUME & PAINCHAUD, YVES						
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)
0154 ACTIVE	UNITED STATES	13/550,325	16-07-2012	8,129,612/26 19-07-2011	TERAXION INC.	28-01-2014 8,538,073	REDACTED

30- Title	COMPACT POLARIZATION-INSENSITIVE OPTICAL RECEIVER						
Inventor(s):	PAINCHAUD, YVES						
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)
0160 ACTIVE	UNITED STATES	13/745,539	19-01-2013	8,129,612/26 19-01-2012	TERAXION INC.	14-10-2014 8,981,989	REDACTED

31- Title	POLARIZATION ROTATOR ASSEMBLY INCLUDING A SUBWAVELENGTH COMPOSITE PORTION						
Inventor(s):	PICARD, MARIE-JOSÉE & PAINCHAUD, YVES						
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)
0183 ACTIVE	UNITED STATES	14/082,889	27-11-2013	8,129,612/26 27-11-2013	TERAXION INC.	8,948,549 03-02-2015	REDACTED

TeraXion patent portfolio as of December 28, 2015

ELECTRICAL WAVEGUIDE TRANSMISSION DEVICE FOR USE WITH A MACH-ZEHNDER OPTICAL MODULATOR									
Inventor(s): PROSYK, KELVIN									
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)	Status	Expire
8183 ACTIVE	UNITED STATES	13722,400	26-12-2012	81678,104 22-12-2011	TERAXION INC.	8,817,966 23-12-2014	REDACTED		

33- Title	MACH-ZEHNDER OPTICAL MODULATOR USING A BALANCED COPLANAR STRIPLINE WITH LATERAL GROUND PLANES									
Inventor(s):	PROSYK, KELVIN									
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)	Status	Expire	
8178 ACTIVE	UNITED STATES	13722,400	26-12-2012	8,678,104 22-12-2011	TERAXION INC.	8,817,966 23-13-2014	REDACTED			

34- Title	MACH-ZEHNDER OPTICAL MODULATOR HAVING AN ASYMMETRICALLY-LOADED TRAVELING WAVE ELECTRODE									
Inventor(s):	PROSYK, KELVIN									
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)	Status	Expire	
G181 ACTIVE	UNITED STATES	14675,854	06-11-2013	81724,756 09-11-2012	TERAXION INC.	8,208,489 14-04-2015			REDACTED	

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35- Title	MACH-ZEHNDER OPTICAL MODULATOR HAVING A TRAVELLING WAVE ELECTRODE WITH A DISTRIBUTED GROUND BRIDGING STRUCTURE						
Inventor(s):	PROSYK, KELVIN & WOODS, DAN NICHOLAS						
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)
9182 ACTIVE	UNITED STATES	14/091,268	15-11-2013	81/734,819 28-11-2012	TERAXION INC.	02-12-2014 6,203,203	REDACTED

36- Title	MONOLITHIC OPTOELECTRONIC TWO-COMPONENT STRUCTURE						
Inventor(s):	PROSYK, KELVIN & KAISER, RONALD & VELTHAUS, KARL-OTTO						
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)
9171 ACTIVE	CANADA	2,746,359 PCT/US2009/061892	15-12-2009	81/723,968 16-12-2008 12/038,372	GESELLSCHAFT E.V. and TERAXION		
9174 ACTIVE	CHINA	20090410E11 PCT/US2009/061892	15-12-2009	81/723,968 16-12-2008 12/038,372 15-12-2008	GESELLSCHAFT E.V. and TERAXION	25-06-2014 21,210,815 01/2011.1	
9188 ACTIVE	UNITED STATES	12/638,372	15-12-2009	81/722,969 16-12-2008	GESELLSCHAFT E.V. and TERAXION INC.	9-10-2016 19-11-2013	REDACTED

TeraXion patent portfolio as of December 28, 2015

0172 ACTIVE	EUROPE	09 833 821.3 PCT/US2009/08107	10-12-2009	01/12/2009 10-10-2008 12/03/2012	TERAXION INC. GISELL SCHAFY E.U. and TERAXION	REDACTED	
0173 ACTIVE	JAPAN	2011-562346 PCT/US2009/08107	15-12-2009	10-12-2009 12/03/2012	TERAXION INC. GISELL SCHAFY E.U. and TERAXION		
0208 ACTIVE	UNITED STATES (DOMESTIC)	14878,108	08-10-2010 10-12-2008 10-12-2009	01/12/2009 12/03/2012	TERAXION INC. GISELL SCHAFY E.U. and TERAXION		

37- Title TRAVELING WAVE MACH-ZEHNDER OPTICAL DEVICE							
Inventor(s): PROSYK, KELVIN							
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s) Status Expire
0175 ACTIVE	UNITED STATES	13483,276	08-12-2008		TERAXION INC.	02-10-2012 9,360,201	REDACTED

38- Title MACH-ZEHNDER MODULATOR WITH BACKPLANE VOLTAGE EQUALIZATION							
Inventor(s): PROSYK, KELVIN							
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s) Status Expire
0188 ACTIVE	UNITED STATES	14353,461	29-04-2014	07/07/2014 28-09-2014	TERAXION INC.		REDACTED

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TERAXION INC.
Client : 000634TeraXion patent portfolio as of December 28, 2015

MACH-ZEHNDER OPTICAL MODULATOR WITH EMBEDDED ACTIVE ELEMENTS						
Inventor(s): PROSYK, KELVIN & HAGLEY, ANDRE						
39- Title	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number
Subject #						
8183 active	UNITED STATES	14/944,836	28-07-2014	6/086,139 / 02-09-2013	TERAXION INC.	
						REDACTED

40. Title SPOT-SIZE CONVERTER FOR OPTICAL MODE CONVERSION AND COUPLING BETWEEN TWO WAVEGUIDES									
Inventor(s): PAINCHAUD, YVES & PICARD, MARIE-JOSEE & LATRASSE, CHRISTINE & POULIN, MICHEL									
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)	Status	Expire
0182 ACTIVE	UNITED STATES	14/835,602	30/05/16	6/086,139 / 02-09-2013 34-02-2014 6/1074,540 / 03-04-2014	TERAXION INC.				
0186 ACTIVE	INTERNATIONAL PCT	PCT/CA2015/050193	30/05/16	29-02-2016 6/1074,540 / 02-09-2013	TERAXION INC.				
REDACTED									

42: Title									
CONNECTORIZED OPTICAL CHIP ASSEMBLY									
Inventor(s):									
PELLETIER, FRANÇOIS & LATRASSE, CHRISTINE & PAINCHAUD, YVES & PICARD, MARIE-JOSEE & POULIN, MICHEL									
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number	Due Date(s)	Status	Expire
6188	UNITED STATES	14,793,114	07/2015	6086139 02-09-2013	TERAXION INC.			REDACTED	

43. Title OPTICAL COUPLING BETWEEN TWO LASER-FUSED WAVEGUIDES						
Inventor(s): PICARD, MARIE-JOSEE & PAINCHAUD, YVES						
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number
0188	UNITED STATES	14/703,749 / 02-02-2015	07-05-15		TERAXION INC.	
						REDACTED
Subject	Status	Due Date(s)	Expires			