

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT3878961

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:	14444635	
CORRESPONDENCE DATA		
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<i>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.</i>		
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ATTORNEY DOCKET NUMBER:	18311/036002	
NAME OF SUBMITTER:	KATE OHALE	
SIGNATURE:	/Robert P. Lord/	
DATE SIGNED:	05/18/2016	
Total Attachments: 6		
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ASSIGNMENT

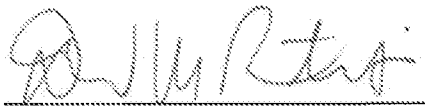
WHEREAS, Ciena Canada, Inc., a Canadian corporation (the "Assignor"), is the owner of the entire right, title, and interest, worldwide, in and to the patents and patent applications listed on Schedule A-1, attached hereto, together with said patent application, all provisionals, divisions, continuations, 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: 038636 FRAME: 0862

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)
8145 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)
9184 ACTIVE	UNITED STATES	13/550,325	16-07-2012	81,600,226 19-07-2011	TERAXION INC.	28-01-2014 8,558,073	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)
8169 ACTIVE	UNITED STATES	13/745,539	19-01-2010	81,698,411 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)
9183 ACTIVE	UNITED STATES	14/082,899	27-11-2013	81,730,323 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
0103 ACTIVE	UNITED STATES	13722,400	26-12-2012	61676,104 22-12-2011	TERAXION INC.	8,817,966 23-13-2014	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	
0174	UNITED STATES	13722,400	26-12-2012	61676,104	TERAXION INC.	8,817,966	REDACTED			
ACTIVE	UNITED STATES	13722,400	26-12-2012	61676,104	TERAXION INC.	8,817,966				

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	
0181 ACTIVE	UNITED STATES	14675,854	06-11-2013	61724,796 09-11-2012	TERAXION INC.	9,038,489 14-04-2015			REDACTED	

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

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	81724,819 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	81723,968 16-12-2008 12638,372	GESELLSCHAFT E.V. and TERAXION		REDACTED
9174 ACTIVE	CHINA	20090410E11 PCT/US2009/061892	15-12-2009	81723,968 16-12-2008 12638,372	GESELLSCHAFT E.V. and TERAXION	25-06-2014 21,210,815 012011.1	
9188 ACTIVE	UNITED STATES	12,638,372	15-12-2009	81722,969 16-12-2008	GESELLSCHAFT E.V. and TERAXION INC.	9-10-2014 19-11-2013	

REDACTED

0172 ACTIVE	EUROPE	08-8-53 1213 PCT/US2008/08107	15-12-2009	8/1/2009 12/8/38-372 15-12-2009	655811 SCHAFT E.V. and TIEMANN PCT/US2008/08107	
8173 ACTIVE	JAP48	2011-04246 PCT/US2008/08107	15-12-2009	18-12-2008 12/8/38-372 15-12-2009	655811 SCHAFT E.V. and TIEMANN PCT/US2008/08107	
8206 ACTIVE	UNITED STATES (US/US2044)	14876 1105	08-10-2010 15-12-2009	15-12-2008 12/8/38-372 15-12-2009	655811 SCHAFT E.V. and TIEMANN PCT/US2008/08107	

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	
0176 ACTIVE	UNITED STATES	125631278	08-12-2008		TERASON INC.	09-10-2012 9,390,201		REDACTED		

3B- 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	
7186 N/A/000	UNITED STATES	143531461	29-04-2014	61876354 26-04-2012	TERANGINIA INC.				REDACTED	

TeraXion patent portfolio as of December 28, 2015

39- Title MACH-ZEHNDER OPTICAL MODULATOR WITH EMBEDDED ACTIVE ELEMENTS						
Inventor(s): PROSYK, KELVIN & HAGLEY, ANDRE						
Subject #	Country	Application # / Pct	Filing Date	Priority	Registered Owner	Registration Date / Number
0183 ACTIVE	UNITED STATES	14/944,836	28-07-2014	5/085,787 02-09-2013	TERAXION INC.	
						REDACTED
						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
0182 ACTIVE	UNITED STATES	14/835,602	30-05-15	5/082,385 30-02-2014 6/1974,540 03-04-2014	TERAXION INC.	
0186 ACTIVE	INTERNATIONAL PCT	PCT/CA2015/050193	30-05-15	5/194,004 29-02-2014 6/1974,540 02-02-2015	TERAXION INC.	
						REDACTED
						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
0184 ACTIVE	UNITED STATES	14,793,114	07-05-15	6/280,320 02-02-2014	TERAXION INC.	
						REDACTED
						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 ACTIVE	UNITED STATES	14/703,749 PCT/CA2015/050281	07-05-2015		TERAXION INC.	
						REDACTED
						REDACTED