503917317 07/15/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3963970

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TERAXION INC.	02/01/2016
9333-9697 QUEBEC INC. (FORMERLY COGO OPTRONICS CANADA INC.)	02/01/2016

RECEIVING PARTY DATA

Name:	CIENA CANADA, INC.
Street Address:	307 LEGGET DRIVE
City:	KANATA, ONTARIO
State/Country:	CANADA
Postal Code:	K2K 3C8

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14263491

CORRESPONDENCE DATA

Fax Number: (713)228-8778

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.

Phone: 7132288600

Email:ohale@oshaliang.comCorrespondent Name:OSHA LIANG LLPAddress Line 1:909 FANNIN

Address Line 2: SUITE 3500

Address Line 4: HOUSTON, TEXAS 77010

ATTORNEY DOCKET NUMBER:	18311/056002
NAME OF SUBMITTER:	KATE OHALE
SIGNATURE:	/Robert P. Lord/
DATE SIGNED:	07/15/2016

Total Attachments: 10

source=Assignment Teraxion to Ciena Canada#page1.tif source=Assignment Teraxion to Ciena Canada#page2.tif source=Assignment Teraxion to Ciena Canada#page3.tif source=Assignment Teraxion to Ciena Canada#page4.tif

PATENT 503917317 REEL: 039166 FRAME: 0858

source=Assignment Teraxion to Ciena Canada#page5.tif source=Assignment Teraxion to Ciena Canada#page6.tif source=Assignment Teraxion to Ciena Canada#page7.tif source=Assignment Teraxion to Ciena Canada#page8.tif source=Assignment Teraxion to Ciena Canada#page9.tif source=Assignment Teraxion to Ciena Canada#page10.tif

PATENT ASSIGNMENT

This PATENT ASSIGNMENT (this "Patent Assignment") is entered into as of February 1, 2016 by and among Teraxion Inc., a Québec corporation ("TeraXion"), 9333-9679 Quebec Inc. (formerly Cogo Optronics Canada Inc.), a Québec corporation (together with TeraXion, the "Assignors") and Ciena Canada, Inc., a Canadian corporation (the "Assignee"). This Patent Assignment is being entered into pursuant to that certain Asset Purchase Agreement, dated January 17, 2016, by and among the Assignors, *inter alia*, and the Assignee (the "Asset Purchase Agreement").

FOR GOOD AND VALUABLE CONSIDERATION, as recited in the Asset Purchase Agreement, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, effective as of the date hereof, the Assignors hereby sell, assign, transfer, convey and deliver to the Assignee all of the right, title and interest that the Assignors possess and have the right to transfer in, to and under the patents and patent applications listed on Schedule A-1 attached hereto (which is incorporated into and made a part of this Patent Assignment) together with (i) any and all continuations, divisionals, and provisionals and patents issuing on any of the foregoing, and all reissues, reexaminations, substitutions, renewals and extensions and other review procedures that, now or hereafter, of, or that arise out of, descend from, or claim priority to, any of the foregoing patents and patent applications, whether directly or indirectly, existing or future; (ii) any and all foreign patents, foreign patent applications, and foreign counterparts, now or hereafter existing, of or that claim priority to, or from which priority is claimed for, any of the foregoing, whether directly or indirectly, existing or future; and (iii) the right to collect royalties, sue and recover damages (including attorney's fees and expenses) or lost profits for any past, present and future infringement, misappropriation, dilution or other violation and the right to register, file, and seek protection in connection with any of the foregoing throughout the world.

This Patent Assignment is subject to all of the terms, conditions and limitations set forth in the Asset Purchase Agreement. In the event of any conflict or inconsistency between the terms of this Patent Assignment and the terms of the Asset Purchase Agreement, the terms of the Asset Purchase Agreement will prevail. Nothing contained herein shall be deemed to modify, supersede, enlarge, limit or affect the terms of the Asset Purchase Agreement.

The Assignment may be made of record in any government and/or administrative authorities, including in the United States Patent and Trademark Office and the Canadian Intellectual Property Office, as appropriate and desired by Assignee.

Assignors hereby authorize the Commissioner of Patents and Trademarks of the United States and other empowered officials of the United States Patent and Trademark Office and/or the appropriate empowered officials in relevant jurisdictions outside the United States to transfer all of the Patents to Assignee as assignee of the entire right, title and interest therein or otherwise as Assignee may direct, in accordance with this Patent Assignment, and to issue to Assignee or as Assignee may direct all letters patent and other items referred to above which may issue with respect to any patent application included in the Patents, in accordance with this Patent Assignment.

The Assignors hereby agree that they will, at any time and from time to time after the date hereof and at the Assignee's cost, and without further consideration, take, or cause to be taken, such further actions, and execute and deliver such further instruments or documents, as may be reasonably requested by the Assignee to effectuate the purposes of this Patent Assignment; provided, however, that the parties' obligations under this provision shall be subject to any restrictions and limitations as are set forth in the similar provisions of the Asset Purchase Agreement and nothing herein shall be deemed to modify, amend, expand or affect in any way the parties' respective rights and obligations under the Asset Purchase Agreement.

This Patent Assignment is governed by, and must be interpreted and enforced in accordance with the Laws of the province of Quebec and the federal Laws of Canada applicable therein.

This Patent Assignment may be executed and delivered in any number of counterparts (including by facsimile, email or other electronic means), each of which is deemed to be an original, and such counterparts together constitute one and the same agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have caused this Patent Assignment to be duly executed by their respective authorized officers as of the date first above written.

CIE	NA CANADA, INC.
Ву:	QJW(ZZJ)
	Name: David M. Rothenstein
	Title: Senior Vice President and Secretary
TER	AXION INC.
Ву:	
	Name: Alain-Jacques Simard
	Title: Chief Executive Officer
കൗര	OCTO CHIEDEC INC
7333	-9679 QUEBEC INC.
Ву:	
	Name: Alain-Jacques Simard

Title: Chief Executive Officer

[Signature page to Patent Assignment]

IN WITNESS WHEREOF, the parties hereto have caused this Patent Assignment to be duly executed by their respective authorized officers as of the date first above written.

CIENA CANADA, INC.

R	X P	•
10	y	•

Name: David M. Rothenstein

Title: Senior Vice President and Secretary

TERAXION INC.

By:

Name: Alain-Jacques Simard Title: Chief Executive Officer

9333-9679 QUEBEC INC.

By:

Name: Alain-Jacques Simard Title: Chief Executive Officer

[Signature page to Patent Assignment]

Patents

See attached.

TeraXion patent portfolio as of December 28, 2015

ZZ- Titte	METHOD AN	METHOD AND AFFARA IUS FOR MERSURING	でである。	ತಿರಗಣಗಳ ಸಿಗ	がたっとつこう (Mary Compression of the Compress	SAFALUK UTANAK ERKEITUS VIRIMINAS VI		***************************************
inventoris):	PAINCHAUD	NAMEDIES: PRINCHAUD, YVES & POULIN, MICHEL & MORIN, MICHEL	IR, MICHEL	. & MORCH.	MICHEL.		RR MORE		
Subject #	Country	Application #	Filing Date	Priority	Registered Owner	Registered Registration Owner Date / Wumber	Due Date(s)	Status	EXE OX Production
	al ware				-		潘		
0145 ACTIVE	UNITED STATES	12/816.137	29-10-2010	81/256,028 29-10-2009	TERAZION INC.	6145 UNITED STATES 12/N16.137 28-10-2010 61/266,026 TEPAXION INC. 26-03-2013 ACTIVE ACTIVE 8.486,621		REDACTED	

29. Title	FIBER COUF	FIBER COUPLING TECHNIQUE ON A WAVEGUIDE	UE ON A W	VAVEGUIDE	?			manumini ma	
nwntorist	PELLETIER,	nventorisi: PELLETIER, FRANÇOIS & ROBIDOUX, GUIL.	OBIDOUX	3	IL AUME & PAINCHAUD, WES	33AA 'GO		WE & PANCHAID TVES	
&noject *	Conntro	Application # Filling / Pct Date	Filling Date	Priority	Registered Owner	Registered Registration Owner Date / Number	Due Date(s)	Status	Expire
		•••		***					Marian Company of the
0154 ACTIVE	UNITED STATES	UNITED STATES 13/650,225 16-07-2012 19-0	16-07-2012	409,256 37-2011	TERADION INC.	505.256 TERADION INC. 28-01-2014 07-2011		KEDACTED	

Inventor(s): PAINCHAUD, YVES	AINCHAUD.	PAIKCHAUD, YVES						(E)	
Subject #	Country	Application # Filling / Pct Date	Filling Date	Priority	Registered Owner	Registered Registration Owner Date / Number	Due Date(s)	Status	Expire
0160 ACTIVE	UNITED STATES	13/745.529	18-61-2013	61/588,411	TERAMON INC.	### ##################################		REDACTED	
· · · · · · · · · · · · · · · · · · ·		Sugariani de la composição	***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					······································

31- Title	POLARIZATI	ON ROTATOR A	SSEMBLY	rect current	s a subwave	LENGIH COMP	polarization rotator assembly including a subwavelength composite portion	cluding a subwavelength composite portion	
muentor(s):	PICARD, MA	PICARD, WARIE-JOSÉE & PAINCHAUD, Y	A (INCHAND)						
Subject #	Country	Application # Filling	Date Oate	Priority	Registered	Registered Registration Owner Date / Number	Oue Date(s)	Status	Expire
6163 ACTIVE	(MITTED STATES	0183 (MITED STATES 14/082,508 27-11-0013 61 27-11-0013 27	27-11-2013	61/730.253 27-11-2012	TERAXION INC.	0183 (MITED STATES 14/082.869 27-11-2013 FEMANON NC 39-02-2015		REDACTED	,

ROBIC

Teraxion patent portfolio as of December 28, 2015

	によっている。	ELECTRICAL WAVEGUIDE TRANSMISSION D	Kansmiss	25.22	ir rok cur R cur	HIM & MACH-CE	yavegude transmission device for use with a mach-lephder of hom incrolator		***************************************
nwentor(s):	PROSYR, KELVIN	rvin.				£			
Subject #	Country	Application #	Piling Dage See	Priority	Registered Owner	Registration Date / Number	Due Date(s)	Status	Expire
U163 ACTIVE	UNITED STATES	13/722,400	26-12-2012	81/578,104	TEPAKION INC.	#163 UNITED STATES (3/1/22A00 26-42-2012 81579.104 TEPAXON B4C. 23-42-2014 ACTIVE		REDACTED	

33- Title	WACH-ZEHN	Mach-Zehnder optical modulator u	MODULAT	or using ,	a Balanced	COPLANAR SIR	optical modilator using a balanced coplarar stripline with lateral urrumup planes	AMES	
nventor(s):	Inventor(s): PROSYK, KELVIN	NIA I				£			
Subject #	Subject # Country	Application # Filling	O at a	Priority	Registered Owner	Registered Registration Owner Date / Number	Due Date(s)	Status	Expire
800	7 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2	CERRIANY	15-02-2013	2000000	TERVOIC NAC.	23.00			
9165 ACTIVE	UNITED STATES	13/167.525	14-02-2013	61/598.894 15-02-2012	TERAXION INC.	UNCHED STATES 13/767.525 (4-02/2013 61/508.804 TERAXICON BIG. 30/08-2015		REDACTED	

34. Title	MACH-ZEHN	DER OPTICAL A	MODULATE	JR HAVING	AN ASYMME!	RICALLY-LOAD	Machzehnder optical modilator having an asymmetrically-loaded traveling wave elevinude	55	
nventor(s)	PROSYK, KE	NIA.3			***************************************		WARDER FOR KELVIN	***************************************	***************************************
Subject #	Country	Application #	Filling Date	Priority	Registered Owner	Registered Registration Owner Date / Number	Due Date(s)	Skatus	m jq 5
0181 ACTWE	UNITED STATES	14/075,854	06-11-2013 61 cs	61772A.786 69-11-2012	TERAKION INC.	0181 UNITED STATES 14075,364 06-11-2013 61774,785 TERAXION RC. 14-04-2015		REDACTED	

YaraXion patent portfolio as of December 28, 2015

35 Time	MACH-ZEHM	DER OPTICAL	MODULATO	OR HAVING	a travellin	ig wave elect	mach-zehnder optical modulator having a travelling wave electrode with a distributed grown bridging structure	und oktobing sindi jure	
iventoris):	PROSYK, KE	Inventoria): PROSYK, KELVIN & WOODS, IAN NICHOLAS	S. IAM MICH	OLAS	***************************************				
Subject #	Subject # Country	Application #	Filing	Priority	Registered Owner	Registered Registration Owner Date / Number	Due Date(s)	Status	Expire
0182 ACTIVE	UNATED STATES	14/081,388	15-11-2013	15-11-2013 61/724.810 08-11-2012	4.816 TERAZON INC.	02-12-2014 8-903,202		REDACTED	·

36- Title	SWOKOT THIC	MONOLITHIC OPTOELECTRONIC TWE-COMPONENT STRUCTURE	OMIC TWE	COMPONE	3%. THIS MONDLITHIC OPTOELECTRONIC TWE-COMPONENT STRUCTURE	u.			
Inventorist	PROSYK, KE	LVIN & KAISER	ROMALD	& VELTHA	JS, KARL-OTT	o		INVERTIGIES: PROSYK, KELVIN & KARGER, ROMALD & VELTHAUS, KARL, OT 10	
Subject *	Country	Country Application# Filling	Filing	Priority	Registered Owner	Registration Date / Number	Due Date(s)	Fee Estimate / Status	Expire
0171 ACTIVE	CAWADA	0171 2.746.369 15-12.2509 ACINE CASADA RECEISEROSOSOSOS 15-12.2509	3	16-12-2008	GESELLSCHWET EV. and TERAXION				
0174 ACTIVE	CHINA	CHBVA 200904180811 15-12-2009	*******	16-12-2006 12-636.372 08-16-2008	GESELLSCHAFT E.V. and TERRADOR TO THE STREET OF THE STRE	FRAGRECHER Gebellschaft 25-06-2014 EV. and Territor 27. 2008 15 019:01 1.1		REDACTED	
0188 ACTIVE	UNITED STATES	### 12698.372 15-12-2039 ACTIVE UNITED STATES 12698.372 15-12-2039	15-12-2069		FRAUSPONER. GESELLSCHAFT E.V. and TERAXION SAC	8,182,546 (0-1)-2018			,

TERAXION INC. Client: 000634

> 808 0 0

TeraXion patent portfolio as of December 28, 2015

				076 777 00	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-
0172	260618	08 833 821.3	* * * * * * * * * * * * * * * * * * *	18-12-2068	GESELLSCHAFT	2000	
ACTIVE	1	PCTAJS2009/0681071		32/638,372	E.V. and TERAXION		
			~	15,12,320	200		
***************************************		80,77,88	~	876.72.03	THE MONTH CONTROL		COFCACED
6473	د د	2011-542348	0000 20 27	18-12-2008	GESELLSCHAFT	.00°	Chair Complete
SALES	TAP RES	FCTAUS2009/069/07\$	117 12-413(va	12/638,372	E.V. and COBO	220	
			~~;	\$5.12-2089	20,000,000,000		
-	-	Secretarian de la constitución d		577,22,808	18850 P. S. C.		
0200	NUMBER STATES		06-10-2015	15-12-2008	GESELLSCHAFT.		
ACTIVE	(DIVISIONAL)	14/14/14/10/10	15-12-2009	12/636,372	E.V. and TERAXION		
		12,32,320		COURT 1-50	3,000		***************************************

37. Title	TRAVELING	Traveling wave mach-zehnder offical device	CHNDERO	PTICAL DE	ACE VICE			CAL DEVICE	***************************************
nventoris):	Inventorie): PROSYK, KELVIN	Z.IX		· · · · · · · · · · · · · · · · · · ·				and the second s	
Subject #	Country	Application # Filing / Pct Date	Filing Date	Priority	Registered Owner	Registr Date / No	Due Dato(s)	Status	Exp pira
0478 ACTIVE	UNITED STATES	0175 (WHTED STATES 12/533276 08-12-2008 ACTIVE (WHTED STATES 12/533275	08-12-2008		TERAXION NC.	TERAXION W. 82-10-2012 3-10-2012	24	TERANDON WE. 8-250.231	

38- Title	MACH-ZEHNI	MACH-ZEHNDER MODULATOR WITH BACKPLANE VOLTAGE EQUALIZATION	OR WITH E	BACKPLAN	E VOLTAGE E	GUALIZATION	38. THE MACH-ZEHNDER MODULATOR WITH BACKPLANE VOLTAGE EQUALIZATION		
Inventor(s): PROSYK, KELVIN	PROSYK, KE	K.VIIX	***************************************		***************************************	minnennammentennaminaminaminaminaminaminaminaminaminam	***************************************		
S. training	Country	Application # Filling p	T S	Priority	Registered	Registered Registration	Due Date(s)	Status	m wig wire
k 5		<u>g</u>	C S S S	•	owne o	Owner Date / Number			
0189	UNITED STATES	UNUTED STATES 14263.491 28-04-2014 261	28-04-2014	81/8/8/2004 8/02/40/4/	TERAKION INC.	(818.20) TERAKON W.C.		REDACTED	

TERAXION INC.

ROBEC

RECORDED: 07/15/2016

TeraXion patent portfolio as of December 28, 2015

39- Title	**ACH-ZEHN	DER OPTICAL	MODULAR	OK WHEN EN	ಸಹ ಬಾಲದಿಗಳು	Machzehnder Optical Rodulatok With Embelueu alive elements				****************
nventor(s):	PROSYK, KE	PROSYK, KELVIN & HAGILEY, ANDRE	Y, AMDRE							***************************************
Subject #	Country	Application # Filing / Pot Date	Filing	Priority	Registered Owner	Registered Registration Owner Date / Number	Due Date(s)	Status	<u>s</u>	expire
					***************************************			Care Care		
0483	UNITED STATES	14/444,835	28-07-2014	7.887	TERANION INC.	TERANION MC.	:	KEUAC I EU		

inventor(s):	PAINCHAUD.	Inventoris): PAINCHAUD, YVES & PICARD, MARIE-JOSE	D, MARRIE	JOSEE & L	ATRASSE, CH	ee a latrasse, christine a poli	M, MICHEL	the second secon	
Subject #	Subject # Country	Application #	Filling	Priority	Registered Owner	agistered Registration Owner Date / Number	Due Date(s)	Status	Expire
0185 ACTNE	0185 UNITED STATES	14/835,602	3/2/2015	57596 (265 26-02-2014 61/874,140 02-04-2014	TERAGON INC.	TERAKON MC.		REDACTED	: ***
0486 ACTIVE	INTERNATIONAL POT	6186 RYERGIATIONAL PCITCAZO15086153 3020015 516948306 ACTIVE PCI PCITCAZO15086153 3020015 516974140	3/2/2018	611946,098 28-02-2014 61674,140 02-04-2014	TERAXION INC.	TEFAXION NG.			· · · · · · · · · · · · · · · · · · ·

42- Title	CONNECTOR	COMMECTORIZED OPTICAL CHIP ASSEMBL)	CHIP ASS	EMBLY					
Inventor(s):	PELLETIER	nventor(s); PELLETIER FRANÇOIS & LATRASSE, CHRI	ATRASSE,	CHERISTINE	& PAINCHAU	D YVES & PICAL	RISTINE & PAINCHAID, YVES & PICARD, MANIEJOSEE & POLLIN, MICHEL		
Subject #	Committé	Application #	Filling Date	Priority	Registered Owner	Registered Registration Owner Date / Number	Due Date(s)	Status	erie Sylvanie
X8.10			3/3/00/16	0000000	De NORgan	TOTAL STATE OF THE PARTY OF THE		REDACTED	
27.43.29	LINGSEL SINGS	STORES STATES A POST OF POST OF	2	8000000		7.003	00000		

	Expire	***************************************
	Status	TED
	Due Date(s)	REDACTED
D WAVEGUIDES	ared Registration	TERAXION INC.
LASER FUS	Priority	
PEEN TWO	Filling	8/10/2015
UPLING BETTA	Application #	100000000000000000000000000000000000000
OPTICAL CO	Country	UNITED STATES
43- Title	Subject #	0194