PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2585495

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HARMONIC INC.	03/05/2013

RECEIVING PARTY DATA

Name:	AURORA NETWORKS, INC.
Street Address:	5400 BETSY ROSS DRIVE
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 18

Property Type	Number
Patent Number:	5181214
Patent Number:	5216729
Patent Number:	5278923
Patent Number:	5282072
Patent Number:	5424680
Patent Number:	5656978
Patent Number:	5828477
Patent Number:	5940196
Patent Number:	6121857
Patent Number:	6122302
Patent Number:	6285252
Patent Number:	6304369
Patent Number:	7242871
Patent Number:	7945172
Patent Number:	8369712
	DATENT

REEL: 031446 FRAME: 0712

PATENT "

Patent Number:	8032029	
Application Number:	13252017	
Application Number:	29080376	

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	AURA-00101
NAME OF SUBMITTER:	DAVID R. STEVENS
Signature:	/David R. Stevens/
Date:	10/21/2013

Total Attachments: 6

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> PATENT REEL: 031446 FRAME: 0713

MASTER PATENT ASSIGNMENT

THIS MASTER PATENT ASSIGNMENT (this "Patent Assignment") is made and entered into as of March 5, 2013 by and between AURORA NETWORKS, INC., a Delaware corporation ("Assignee"), and Harmonic Inc., a Delaware corporation ("Assignor"). Each of Assignee and Assignor are referred to herein sometimes as a "Party" and together as the "Parties."

WHEREAS, Assignor and Assignee have entered into an Asset Purchase Agreement, dated as of February 18, 2013 (the "Asset Purchase Agreement"), pursuant to which, among other things, Assignor has agreed to assign to Assignee the Assigned Patents (as defined below).

In consideration of the foregoing and the mutual covenants and agreements contained herein and in the Asset Purchase Agreement, and intending to be legally bound hereby, the parties agree as follows:

- 1. <u>Assigned Patents</u>. The term "Assigned Patents" means the issued patents and pending patent applications set forth on Schedule A attached hereto.
- 2. <u>Assignment</u>. For good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, Assignor hereby assigns, transfers, sells and delivers to Assignee all of Assignor's right, title and interest in and to the Assigned Patents, including the right to claim priority from any of the Assigned Patents, the right to prosecute and maintain any of the Assigned Patents and the right to sue, claim remedies and recover damages for past, present and future infringement or other violation or impairment of any of the Assigned Patents.
- 3. <u>No Warranties</u>. This Patent Assignment provides no warranties of any kind, express or implied, with respect to the Assigned Patents, provided that the foregoing shall not be deemed or interpreted to modify or limit any representations or warranties with respect to the Assigned Patents provided in the Asset Purchase Agreement.
- 4. <u>Further Assurances.</u> Assignor will, without demanding any additional consideration therefor, at the request and expense of the Assignee (except for the value of the time of the Assignor's employees), use its commercially reasonable efforts to do all lawful acts that are necessary for recording, evidencing, and otherwise perfecting the transfer of ownership of the Assigned Patents to Assignee contemplated herein.
- 5. <u>Successors and Assigns</u>. This Patent Assignment will be binding upon, inure to the benefit of, and be enforceable by, the parties and their respective permitted successors and assigns.
- 6. <u>Severability</u>. Whenever possible, each provision or portion of any provision of this Patent Assignment shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision or portion of any provision of this Patent Assignment is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision or portion of any provision in such jurisdiction, and this Patent Assignment shall be reformed,

PATENT REEL: 031446 FRAME: 0714 construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision or portion of any provision had never been contained herein.

- 7. <u>Governing Law</u>. This Patent Assignment shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of choice or conflicts of law thereof.
- 8. <u>Counterparts</u>. This Patent Assignment may be executed in two or more counterparts (including by facsimile or other electronic transmission), all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party.
- 9. <u>Precedence</u>. The Asset Purchase Agreement shall take precedence over this Patent Assignment. In the event of any difference, discrepancy or conflict between any term or condition in the Asset Purchase Agreement and any term or condition in this Patent Assignment, the terms and conditions of the Asset Purchase Agreement shall prevail and govern.

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

Witness Signature:	ASSIGNOR:
Willioss signature.	HARMONIC INC.
Witness Name (print):	
	By:
	Name:
	Title;
Witness Signature:	ASSIGNEE:
	AURORA NETWORKS, INC.
Witness Name (print): Soft D Weiniten	- O
	Name: 6-9 Ivila cad
	17:18 A B B M

Witness Signature:
ASSIGNOR:

HARMONIC INC.

Witness Name (print):
By:

Name:
CARBUAN AUX

Title:
AURORA NETWORKS, INC.

Witness Name (print):
By:

Name:
Title:

IN WITNESS WHEREOF, Assignor and Assignee have caused this Patent

Assignment to be executed as of the date first written above by their respective officers thereunto

[SIGNATURE PAGE TO PATENT ASSIGNMENT]

SCHEDULE A

ASSIGNED PATENTS

Issue Date	1/19/1993	6-1-1993	7/2/1995	1/11/1994	1/25/1994	6/13/1995	6/16/2004	6/16/2004	6/16/2004	8/12/1997	10/27/1998	6/16/2004	6/16/2004	6/16/2004
Patent No. (App. No.)	5,181,214 (07793582)	5,216,729 (07793825)	103,628	5,278,923 (07939940)	5,282,072 (07794864)	5,424,680 (08162405)	746902	746902	746902	5,656,978 (08570444)	5,828,477 (08606197)	804835	804835	804835
Title	Temperature Stable Solid-State Laser Package	Active Alignment System for Laser to Fiber Coupling	Active Alignment System for Laser to Fiber Coupling	Cascaded Optical Modulation System with High Linearity	Shunt-Expansive Predistortion Linearizers for Optical Analog Transmitters	Predistorter for High Frequency Optical Communications Devises	Control Circuit and Method for Direct Current Controlled Attentuator	Multi-Tone Phase Modulation For Light Wave Communication System	Multi-Tone Phase Modulation For Light Wave Communication System	Multi-Tone Phase Modulation For Light Wave Communication System	Multi-Tone Phase Modulation For Light Wave Communication System			
Registered Owner	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.	Harmonic Lightwaves, Inc.
Jurisdiction	USA	USA	Israel	USA	USA	USA	Germany	Great Britain	Netherlands	USA	USA	Germany	France	Great Britain

 $[{\tt ATTACHMENT~I~TO~PATENT~ASSIGNMENT}]\\ A-1$

PATENT REEL: 031446 FRAME: 0718

Jurisdiction	Registered Owner	Title	Patent No. (App. No.)	Issue Date
Italy	Harmonic Lightwaves, Inc.	Multi-Tone Phase Modulation For Light Wave Communication System	804835	6/16/2004
USA	Harmonic Lightwaves, Inc.	Optical Communications System with Wavelength Division Multiplexing	5,940,196 (08/858,067)	8/17/1999
USA	Harmonic, Inc.	AC Power Passing RF Choke with a 15 Gauge Wire	6,121,857 (09/049,800)	9/19/2000
USA	Harmonic, Inc.	Automatic Compensation of CNR and OMI A in Laser Transmitters	6,122,302 (08/987,873)	9/19/2000
USA	Harmonic, Inc.	Apparatus and Method for Broadband Feedforward Predistortion	6,285,252 B1 (09/409,939)	9/4/2001
USA	Harmonic, Inc.	Method and Apparatus for Eliminating Noise In analog Fiber Links	6,304,369 (09/364,003)	10/16/2001
USA	Harmonic Lightwaves, Inc.	Housing for Outdoor Electrical Equipment (Design Patent)	Des. 416,873 (29/080,376)	11/23/1999
Germany	Harmonic Lightwaves, Inc.	Housing for Outdoor Electrical Equipment (Design Patent)	M98 05 553.4	12/4/1998
USA	Harmonic, Inc.	High Dynamic Range Optical Receiver	7,242,871 B2 (10630535)	7/10/2007
USA	Harmonic, Inc.	Four Wave Mixing Suppression	8,032,029 B2 (12/034,486)	10/4/2011
USA	Harmonic, Inc.	Dispersion Compensation Circuitry and System for Analog Video Transmission with Direct Modulated Laser	7,945,172 (12/124,044)	5/17/2011
USA	Harmonic, Inc.	(Divisional) Dispersion Compensation Circuitry and System for Analog Video Transmission with Direct Modulated Laser	8,369,712 (13/070,359)	2/5/2013
China	Harmonic, Inc.	Dispersion Compensation Circuitry and System for Analog Video Transmission with Direct Modulated Laser	ZL 200910130668.7	11/7/2012
European Patent Application	Harmonic, Inc.	Dispersion Compensation Circuitry and System for Analog Video Transmission with Direct Modulated Laser	09002277.3	Filed: 2/18/2009

PATENT

REEL: 031446 FRAME: 0719 RECORDED: 10/21/2013