TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM357643

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
XTERA COMMUNICATIONS, INC.		01/16/2015	CORPORATION: DELAWARE

RECEIVING PARTY DATA

Name:	SQUARE 1 BANK
Street Address:	406 BLACKWELL STREET
Internal Address:	SUITE 240
City:	DURHAM
State/Country:	NORTH CAROLINA
Postal Code:	27701
Entity Type:	CORPORATION: NORTH CAROLINA

PROPERTY NUMBERS Total: 2

Property Type	Number	Word Mark
Registration Number:	2786774	XTERA
Registration Number:	2750767	XTERA

CH $65.00 2786774

CORRESPONDENCE DATA

Fax Number: 9193541278

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: 919-314-3086
Email: loandocsdept@square1bank.com
Correspondent Name: Square 1 Bank
Address Line 1: 406 Blackwell Street
Address Line 2: Suite 240
Address Line 4: Durham, NORTH CAROLINA 27701

NAME OF SUBMITTER:	NICHOLAS NANCE
SIGNATURE:	/NICHOLASNANCE/CCD
DATE SIGNED:	10/06/2015

Total Attachments: 10
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INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT is entered into as of January 16, 2015 by and between **SQUARE 1 BANK** ("***Bank***") and **Xtera Communications, Inc.**, a Delaware corporation ("***Grantor***").

RECITALS

A. Bank has agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "Loans") in the amounts and manner set forth in that certain Loan and Security Agreement by and between Bank and Grantor dated of even date herewith (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement).

B. Extension of credit by the Bank pursuant to the Loan Agreement is subject to the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Loan Agreement.

C. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement and all other agreements now existing or hereafter arising between Grantor and Bank, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure all of its present and future indebtedness, liabilities and obligations under the Loan Agreement and under any other agreement now existing or hereafter arising between Bank and Grantor, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property (including without limitation those Copyrights, Patents and Trademarks listed on Exhibits A, B and C hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof (collectively, "Intellectual Property Collateral"). Notwithstanding anything to the contrary contained in this agreement, the security interest created by this agreement shall not extend to, and the term "Intellectual Property Collateral" shall not include, any Excluded Property.

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Bank as a matter of law or equity. Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

Grantor represents and warrants, as of the date hereof, that Exhibits A, B, and C attached hereto set forth any and all intellectual property rights of Grantor which are registered with or subject to an application filed with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

Grantor:

XTERA COMMUNICATIONS, INC.

By _____
Name Jack Owen
Title Secretary

Address of Grantor:

500 W. Bethany Drive, Suite 100
Allen, TX 75013

Bank:

Square 1 Bank

By _____
Name _____
Title _____

Address of Bank:

406 Blackwell Street, Suite 240
Durham, NC 27701
Attn: Loan Documentation Department

[Signature Page—Intellectual Property Security Agreement-Parent]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

Grantor:

XTERA COMMUNICATIONS, INC.

By _____
Name _____
Title _____

Address of Grantor:

500 W. Bethany Drive, Suite 100
Allen, TX 75013

Bank:

Square 1 Bank

By _____
Name A Kiet Meage
Title Senior Vice President

Address of Bank:

406 Blackwell Street, Suite 240
Durham, NC 27701
Attn: Loan Documentation Department

[Signature Page—Intellectual Property Security Agreement-Parent]

EXHIBIT A

COPYRIGHTS

Description	Registration Number	Registration Date
NONE		

EXHIBIT B

PATENTS

Patent Description	Registration or Serial Number	Registration or Filing Date	Country	
Nonlinear fiber amplifiers used for a 1430-1530nm low-loss window in optical fibers	6,239,903	5/29/2001	USA	*
CHIRPED PERIOD GRATINGS FOR RAMAN AMPLIFICATION IN CIRCULATOR LOOP CAVITIES	6,374,006	4/16/2002	USA	*
ALL BAND AMPLIFIER	6,574,037	6/3/2003	USA	*
S+ BAND NONLINEAR POLARIZATION AMPLIFIERS	6,600,592	7/29/2003	USA	*
NONLINEAR FIBER AMPLIFIERS USED FOR A 1430-1530NM LOW-LOSS WINDOW IN OPTICAL FIBERS	6,606,187	8/12/2003	USA	*
HIGH EFFICIENCY RAMAN AMPLIFIER	6,618,192	9/9/2003	USA	*
DISPERSION COMPENSATING NONLINEAR POLARIZATION AMPLIFIERS	6,693,737	2/17/2004	USA	*
LOW-NOISE DISTRIBUTED RAMAN AMPLIFIER USING BI-DIRECTIONAL PUMPING USING MULTIPLE RAMAN ORDERS	6,714,342	3/30/2004	USA	*
NONLINEAR POLARIZATION AMPLIFIERS IN NONZERO DISPERSION SHIFTED FIBER	6,760,148	7/6/2004	USA	*
ALL BAND AMPLIFIER	6,876,489	4/5/2005	USA	*
MULTI-STAGE OPTICAL AMPLIFIER AND BROADBAND COMMUNICATION SYSTEM	6,885,498	4/26/2005	USA	*
NONLINEAR POLARIZATION AMPLIFIERS IN NONZERO DISPERSION SHIFTED FIBER	6,919,986	7/19/2005	USA	*
LASER DIODE PUMP SOURCES	6,924,926	8/2/2005	USA	*
CO-PROPAGATING RAMAN AMPLIFIERS	6,943,936	9/13/2005	USA	*
FIBER-OPTIC COMPENSATION FOR DISPERSION, GAIN TILT, AND BAND PUMP NONLINEARITY	6,985,283	1/10/2006	USA	*
SAGNAC RAMAN AMPLIFIERS AND CASCADE LASERS	5,778,014	7/7/1998	USA	
MULTI-STAGE OPTICAL AMPLIFIER AND BROADBAND COMMUNICATION SYSTEM	6,359,725	3/19/2002	USA	
Broadband sagnac raman amplifiers and cascade lasers	6,370,164	4/9/2002	USA	
SYSTEM AND METHOD FOR WIDE BAND RAMAN AMPLIFICATION	6,532,101	3/11/2003	USA	
SYSTEM AND METHOD FOR CONTROLLING NOISE FIGURE	6,587,259	7/1/2003	USA	

METHOD AND APPARATUS FOR AMPLIFIER CONTROL	6,594,071	7/15/2003	USA
MULTI-STAGE OPTICAL AMPLIFIER AND BROADBBAND COMMUNICATION SYSTEM	6,603,594	8/5/2003	USA
LOW-NOISE DISTRIBUTED RAMAN AMPLIFIER USING BI-DIRECTIONAL PUMPING USING MULTIPLE RAMAN ORDERS	6,631,025	10/7/2003	USA
BROADBAND AMPLIFIER AND COMMUNICATION SYSTEM	6,631,028	10/7/2003	USA
SYSTEM AND METHOD FOR WIDE BAND RAMAN AMPLIFICATION	6,646,788	11/11/2003	USA
SYSTEM AND METHOD FOR CONVERTING A PLURALITY OF WAVELENGTHS	6,744,553	6/1/2004	USA
METHOD AND APPARATUS FOR OPTICAL ELEMENT MANAGEMENT	6,751,371	6/15/2004	USA
FIBER OPTIC TRANSMISSION SYSTEM FOR A METROPOLITAN AREA NETWORK	6,778,321	8/17/2004	USA
GAIN CONTROL IN NONLINEAR POLARIZATION AMPLIFIER STAGES	6,807,197	10/19/2004	USA
METHOD AND SYSTEM FOR REDUCING DEGRADATION OF OPTICAL SIGNAL TO NOISE RATIO	6,810,214	10/26/2004	USA
FIBER OPTIC TRANSMISSION SYSTEM WITH LOW COST TRANSMITTER COMPENSATION	6,819,478	11/16/2004	USA
OPTICAL AMPLIFICATION USING LAUNCHED SIGNAL POWERS SELECTED AS A FUNCTION OF A NOISE FIGURE	6,819,479	11/16/2004	USA
REDUCING LEADING EDGE TRANSIENTS USING CO-PROPAGATING PUMPS	6,825,973	11/30/2004	USA
OPTICAL AMPLIFICATION USING POLARIZATION DIVERSITY PUMPING	6,833,946	12/21/2004	USA
MULTIPLE WAVELENGTH PUMPING OF RAMAN AMPLIFIER STAGES	6,914,717	7/5/2005	USA
MULTI-STAGE OPTICAL AMPLIFIER AND BROADBAND COMMUNICATION SYSTEM	6,954,303	10/11/2005	USA
SYSTEM AND METHOD FOR DISPERSION COMPENSATION IN AN OPTICAL COMMUNICATION SYSTEM	7,058,311	6/6/2006	USA
BAND OPTICAL ADD/DROP MULTIPLEXING	7,068,938	6/27/2006	USA
SYSTEM AND METHOD FOR MANAGING SYSTEM MARGIN	7,197,245	3/27/2007	USA
PRE-EMPHASIZED OPTICAL COMMUNICATION	7,233,432	6/19/2007	USA

BAND OPTICAL ADD/DROP MULTIPLEXING	7,254,337	8/7/2007	USA
SYSTEM AND METHOD FOR DISPERSION COMPENSATION IN AN OPTICAL COMMUNICATION SYSTEM	7,254,341	8/7/2007	USA
SYSTEM AND METHOD FOR IMPLEMENTING A HIGH CAPACITY UNREPEATERED OPTICAL COMMUNICATION SYSTEM	7,336,869	2/26/2008	USA
MODULATOR CONTROL SYSTEM	7,379,223	5/27/2008	USA
TWIN OPTICAL AMPLIFIER WITH DUAL PUMP POWER CONTROL	7,515,331	4/7/2009	USA
TRANSMISSION SYSTEM	7,526,205	4/28/2009	USA
SYSTEM AND METHOD FOR FRACTIONAL RAMAN ORDER PUMPING IN OPTICAL COMMUNICATION SYSTEMS	7,567,593	7/28/2009	USA
SYSTEM AND METHOD FOR IMPLEMENTING A HIGH CAPACITY UNREPEATERED OPTICAL COMMUNICATION SYSTEM	7,665,909	2/23/2010	USA
PULSED HIGH LOSS LOOP BACK SIGNALLING SCHEME	7,684,711	3/23/2010	USA
SYSTEM AND METHOD FOR IMPLEMENTING A BOOSTERLESS OPTICAL COMMUNICATION SYSTEM	7,742,223	6/22/2010	USA
METHOD FOR TRANSMITTING NETWORK PACKETS	7,801,145	9/21/2010	USA
ADAPTIVE PULSE SHAPE CONTROL	7,822,348	10/26/2010	USA
DATA FORMAT FOR HIGH BIT RATE WDM TRANSMISSION	7,860,403	12/28/2010	USA
REMOTE LARGER EFFECTIVE AREA OPTICAL FIBER	7,869,673	1/11/2011	USA
METHOD AND APPARATUS FOR PRODUCING RZ-DPSK MODULATED OPTICAL SIGNALS	7,885,550	2/8/2011	USA
SYSTEM AND METHOD FOR MANAGING SYSTEM MARGIN	7,974,002	7/5/2011	USA
TRANSMISSION SYSTEM	7,978,973	7/12/2011	USA
OPTICAL RECEIVER AND AN OPTICAL TRANSMISSION SYSTEM INCORPORATING THE SAME	7,995,929	8/9/2011	USA
SUBMARINE OPTICAL REPEATER	8,111,453	2/7/2012	USA
OPTICAL COMMUNICATION USING SHARED OPTICAL PUMPS	8,111,454	2/7/2012	USA
OPTICAL AMPLIFIER CAPABLE OF AMPLIFYING OPTICAL SIGNALS THAT TRAVERSE SEPARATE TRANSMISSION FIBERS	8,145,062	3/27/2012	USA

OPTICAL AMLIFIER WITH RAMAN AND RARE-EARTH-DOPED FIBER AMPLIFIER BOTH PUMPED EFFICIENTLY USING DIRECT AND REFLECTED PUMP LIGHT	8,228,598	7/24/2012	USA
OPTICAL AMLIFIER BANDWIDTH ALTERATION	8,233,216	7/31/2012	USA
PHASE SHIFT KEYED HIGH SPEED SIGNALING	8,351,798	1/8/2013	USA
POLARIZATION CONTROLLER	8,355,128	1/15/2013	USA
DEPOLARISED WDM SOURCE	8,380,064	2/19/2013	USA
DISTINCT DISPERSION COMPENSATION FOR COHERENT CHANNELS	8,380,068	2/19/2013	USA
INTRODUCTION-SIDE DISPERSION SHIFTING OF CHANNELS	8,380,069	2/19/2013	USA
Repeater Surge Coil and Diode Chain Design	8,380,071	2/19/2013	USA
Automatic Pre-Emphasis	8,406,637	3/26/2013	USA
Method for Managing IP Tunnels	8,432,922	4/30/2013	USA
Mulpi-Stage Polarization Mode dispersion Compensation	8,442,405	5/14/2013	USA
Tunable Optical Discriminator	8,718,476	5/6/2014	USA
Transmission System	10/510731	4/14/2003	USA
Optical Communication Using Coupled Optically Pumped Amplifiers	12/355512	1/16/2009	USA
Polarization Multiplexed Signalling Using Time Shifting in Return-to-Zero Format	13/468336	5/10/2012	USA
Optical Repeater Amplifier Insertion and Removal Technology	PCT/US2014/011593	1/15/2014	USA
Tilt Control Through Optical Pump Power Adjustment	14/200863	3/7/2014	USA
Integrated Assembly for Switching Optical Signals	13/772189	2/20/2013	USA
Repeater OTDR Using Repeater Based Raman Pumps	14/109735	12/17/2013	USA
Optical Repeater Amplifier Insertion and Removal Technology	13/742076	1/15/2013	USA
System Control of Repeatered Optical Communications System	13/834968	3/15/2013	USA
Adjustable Impedance Laser Driver	14/200770	3/7/2014	USA
Network Management System Architecture of a Telecommunications Network	14/341323	7/25/2014	USA
Multi-Span Optical Communicatons Link Having Remote Optically Pumped Amplifier	61/955486	3/19/2014	USA
Feedback Controlled Raman Amplification in Optical System	61/985232	4/28/2014	USA

* Owned jointly with the University of Michigan

EXHIBIT C

TRADEMARKS

Description	Registration/ Application Number	Registration/ Application Date
The name "Xtera"	2786774	11/25/2003
The name "Xtera" with design	2750767	8/12/2003