		·							
FORM PTO-1595 (MODI	FIED)	RECORDATION		COVER		U.S.DEF	PARTMEN	T OF CO	MMERCE
(Rev. 6-93)	(Rev. 6-93)		EET Patent and Trac			nd Traden	nark Office		
OMB No. 0651-0011 (exp.		PATENT			1 1	1 1			
	Commissioner of Patents ar	nd Trademarks: 1							ereor.
1. Name of convey.	<del>-</del> - ·		2.	Name and ac				es):	
XtremeSpectrum	<del></del>		Name:		Silicon Va	alley Ba	ank		
8133 Leesburg P	ike		Interna.	l Address:				_	
Suite 700	<u></u>				2000 III	D.:	<del>-</del>		
Vienna, Virginia	. 22182		Addres	S	3003 Tası	nan Dr	ive		
		Dva No	City	Santa Clara		State:	CA	Zip:	95054
	onveying party(ies) attached?	Yes No	City:	al name(s) and a				_ <sup>Z.ip.</sup>	75054
3. Nature of convey			Addition	ar name(s) and a	iddless(es) att	action:	No		
Assignment	☐ Merger ment ☐ Change of I	Name		П 1 <i>с</i> 8		ŔŊ	110		
Security Agrees  Other	nem change of .	Name							
I <del>-</del>		<del></del> -	1						
Execution Date.	Cordary 20, 2005	·	1						
4. Application num	ber(s) or patent number(s):		J						
1	being filed together with a ne	ew application, t	he execu	tion date of th	he application	on is :			
	•			ent No.(s)					
A. Patent Application No. (s) SEE ATTACHED LIST			SEE ATTACHED LIST						
		onal numbers atta	l ached2 D		No				
5 Name and addre	ss of party to whom correspond	· · · · · · · · · · · · · · · · · · ·				and par	tents inv	olved:	
	nt should be mailed:	Sidefice	6. Total number of applications and patents involved: 23						
Name:	Michael J. Bevilacqua, Esq	uire	7. Tota	al Fee (37 CF			. \$920.0	)0	
Internal Address:	Hale and Dorr LLP	·		Enclosed	,			·	-
Street Address:	60 State Street				es to Deposi	it Acco	unt		
•	<del></del>			any additional fe	-			during th	e
City: Boston	State: MA	Zip: 02109		y of this applica					
		· <u>-                                   </u>	8. Dep	osit account	number:			_	
			`		)219				
	<u> </u>		(Attach	duplicate copy o	f this page if p	aying by	deposit a	ccount.)	
		DO NOT USE	E THIS S	PACE					
	<u></u>								
9. Statement and si	_			_	_	_			_
1	knowledge and belief, the f	oregoing inform	ation is t	rue and corre	ect and any	attache	ed copy i	s a true	copy of
the original docs		210	01	57/				1/201	103
Michael J. Bevil	<del></del>	Simoton	XJD.	- hel beg	•			2   00   319	<i>0</i> 5
Name of Person	orguing	Signatur					ַ <u>ע</u>	alt '	

Total number of pages including cover sheet, attachments, and document: 10

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

114.146.120

Hale and Dorr LLP Docket Number

**PATENT** 

## EXHIBIT B - Patents (Published) XTREMESPECTRUM, INC. PUBLISHED IP

The following is a list of all of XtremeSpectrum's published patent intellectual property. The list is divided by type of patent intellectual property, as follows:

Issued Patents: These are applications that have currently issued as U.S. patents.

Allowed Patent Applications: These are applications that have been allowed by the U.S. Patent Office, but have not yet issued as patents.

**Pending Utility Patent Applications:** These are patent applications that are currently pending in the U.S. Patent Office and have been placed before patent examiners for consideration on their merits.

**Pending PCT Applications:** These are international patent applications filed under the provisions of the Patent Cooperation Treaty. They allow us to defer foreign filing in all countries that are signatories of the treaty.

Issued Patents U.S. Patent No. 6,351,246 U.S. Patent No. 6,505,032

### **Allowed Patent Applications**

Case No. Serial No. Title Filing Date XSI.002C 10/014,668 Planar Ultra Wide Band Antenna with Integrated Electronics 14-Dec-01

186032v1

PATENT REEL: 013447 FRAME: 0476

Pending Utility Patent Applications					
Case No.	Serial No.	Title	Filing Date		
XSI.004	09/685,200	Leakage Nulling Receiver Correlator Structure and Method for Ultra	10-Oct-00		
		Wide Bandwidth Communication System			
XSI.007	09/972,966	Ultra Wide Bandwidth Noise Cancellation Mechanism and Method	10-Oct-01		
XSI.008	09/684,400	Ultra Wideband Communication System, Method, and Device with	10-Oct-00		
		Low Noise Pulse Formation	10.000		
XSI.009	09/684,782	Ultra Wideband Communication System, Method, and Device with	10-Oct-00		
		Low Noise Reception	10.0-+.00		
XSI.010	09/685,195	Ultrawide Bandwidth System and Method for Fast Synchronization	10-Oct-00		
XSI.011	09/685,196	Ultrawide Bandwidth System and Method for Fast Synchronization	10-Oct-00		
A31.011	03/083,170	Using Multiple Detection Arms			
XSI.012	09/685,197	Mode Controller for Signal Acquisition and Tracking in an Ultra	10-Oct-00		
	•	Wideband Communication System			
XSI.013	09/685,198	Analog Signal Separator for UWB Versus Narrowband Signals	10-Oct-00		
XSI.014	09/685,199	A Low Power, High Resolution Timing Generator for Ultra-Wide	10-Oct-00		
		Bandwidth Communications Systems			
XSI.015	09/685,201	Carrierless Ultra Wideband Wireless Signals for Conveying	10-Oct-00		
		Application Data	_		
XSI.016	09/685,202	Method and System for Enabling Device Functions Based on Distance	10-Oct-00		
		Information			
XSI.017	09/685,203	System and Method for Baseband Removal of Narrowband	10-Oct-00		
		Interference in Ultra Wideband Signals	100.00		
XSI.018	09/685,205	System and Method for Generating Ultra Wideband Pulses	10-Oct-00		
XSI.019	09/684,401	Ultrawide Bandwidth System and Method for Fast Synchronization	10-Oct-00		
		Using Sub-code Spins	7 E-1-02		
XSI.020	10/067,423	MAC Improvements to Wireless Personal Area Networks	7-Feb-02		
Pending PCT Applications					
Case No.	Serial No.	Title	Filing Date		
XSI.003PCT	PCT/US01/23	125 Electrically Small Planar UWB Antenna Appratus and System	31-Jul-01		
		Thereof			
XSI.012PCT	PCT/US01/27	7747 Mode Controller for Signal Acquisition and Tracking in an Ultra	2-Oct-01		
		Wideband Communication System			
XSI.013PCT		7746 Analog Signal Separator for UWB Versus Narrowband Signals	2-Oct-01		
XSI.018PCT					
XSI.020PCT	PCT/US02/03	3364 MAC Improvements to Wireless Personal Area Networks	7-Feb-02		

PATENT REEL: 013447 FRAME: 0477

### INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of February <u>28</u>, 2003 by and between **Silicon Valley Bank**, a California chartered bank, whose address is 3003 Tasman Drive, Santa Clara, California 95054 ("Bank"); and **XtremeSpectrum**, **Inc.**, a Delaware corporation with a principal place of business located at 8133 Leesburg Pike, Suite 700, Vienna, VA 22182 ("Company").

#### RECITALS

- A. Pursuant to that certain a Loan and Security Agreement, dated October 10, 2000 (as may be amended from time to time, the "Loan Agreement") between Company and the Bank, the Bank has made certain advances of money and extensions of certain financial accommodations to Company in the amounts and manner set forth in the Loan Agreement.
- B. The Company has requested that Bank consent to a bridge loan from Granite Ventures, LLC, as agent for itself and certain other lenders (the "Bridge Loan") and to the grant of a subordinate security interest in certain assets of the Company, and pursuant to that certain Third Loan Modification Agreement of even date herewith by and between the Company and the Bank, Company has agreed to execute and deliver this Agreement and pursuant to this Agreement grant to Bank, a first priority security interest in certain Copyrights, Patents, and Trademarks to secure the obligations of Company under the Loan Agreement.
- C. Capitalized terms used but not defined herein shall have the meanings ascribed to such terms in the Loan Agreement.
- D. Pursuant to the terms of the Loan Agreement, Company has granted to Bank a security interest in all of Company'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 each Loan Document, Company hereby represents, warrants, covenants and agrees as follows:

#### **AGREEMENT**

- 1. The following terms, as used herein, shall have the respective meanings set forth below:
- (i) "Copyrights" means all copyrights, whether now existing or hereafter acquired, all registrations thereof, and all applications in connection therewith, including, without limitation, those listed on *Exhibit A* hereto, and all reissues, extensions or renewals thereof.
- (ii) "Patents" means all patents and patent applications (including each patent and patent application listed on *Exhibit B* hereto), including without limitation, the inventions and improvements claimed therein, together with the reissues, divisions, continuations, renewals, extensions, and continuations-in-part thereof.

Page 1 of 13

- (iii) "Trademarks" means all of the following: all trademarks, trade names, corporate names, company names, business names, fictitious business names, trade styles, service marks, logos, other source or business identifiers, prints and labels on which any of the foregoing have appeared or appear, designs and general intangibles of like nature, now existing or hereafter adopted or acquired, all registrations and recordings thereof, and all applications in connection therewith, including, without limitation, registrations, recordings and applications in the Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof, including, without limitation, those listed on *Exhibit C* hereto, and all reissues, extensions or renewals thereof.
- 2. To secure its obligations under the Loan Agreement, Company grants and pledges to Bank a security interest in all of Company's right, title and interest in, to and under its intellectual property type general intangibles Collateral (including, without limitation, those Copyrights, Patents and Trademarks listed on *Exhibits A, B and C*, respectively, hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license fees and royalties, and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world.
- 3. 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 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 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 or the Loan Agreement, 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.
- Company represents and warrants that *Exhibits A*, *B*, and *C* attached hereto set forth a complete and correct list of all Copyright, Patent and Trademark rights in which the Company has any right, title or interest on the date hereof, including any and all for which Company has registered or filed an application with either the United States Patent and Trademark Office, the United States Copyright Office or any foreign counterpart offices, as applicable.
- 5. If the Company shall (a) obtain rights to any new Copyrights, (b) obtain rights to any new patentable inventions, or become entitled to the benefit of any patent application or patent for any reissue, division, continuation, renewal, extension, or continuation-in-part of any Patent listed on **Exhibit B** or any improvement on any such Patent, or (c) obtain rights to any new Trademarks, the Company shall give to the Bank prompt notice thereof in writing hereof, and shall execute and deliver, and cause to be filed with the Copyright Office or the Patent and Trademark Office, as applicable, a modification of this Agreement amending **Exhibits A, B, or C** hereto to include such new Copyright, Patent or Trademark thereon. Notwithstanding the foregoing, the Company hereby irrevocably appoints the Secured Party its true and lawful attorney (such appointment coupled with an interest), with full power of substitution, to execute an amendment of this Intellectual Property Security Agreement on behalf of the Company amending **Exhibits A, B, or C** hereto to include such new Copyright, Patent or Trademark.

/2003 17:53 FAX

- 6. This Intellectual Property Security Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.
- 7. Whenever possible, each provision of this Intellectual Property Security Agreement shall be interpreted in a manner as to be effective and valid under applicable law, but if any provision of this Intellectual Property Security Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity without invalidating the remainder of such provision or the remaining provisions of this Intellectual Property Security Agreement. This Intellectual Property Security Agreement is to be read, construed and applied together with the Loan Agreement which, taken together, set forth the complete understanding and agreement of Bank and Company with respect to the matters referred to herein and therein.
- 8. This Intellectual Property Security Agreement and all obligations of Company hereunder shall be binding upon the successors and assigns of Company (including any debtor-in-possession on behalf of any Company) and shall, together with the rights and remedies of Bank, for the benefit of Bank, inure to the benefit of Bank, all future holders of any instrument evidencing any of the Obligations and their respective successors and assigns. No sales of participations, other sales, assignments, transfers or other dispositions of any agreement governing or instrument evidencing the Obligations or any portion thereof or interest therein shall in any manner impair the security interest granted to Bank, for the benefit of Bank. Company may not assign, sell, hypothecate or otherwise transfer any interest in or obligation under this Intellectual Property Security Agreement.
- 9. This Intellectual Property Security Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, excluding its law on conflict of laws.

**ISIGNATURES APPEAR ON THE FOLLOWING PAGE** 

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.

BANK:	COMPANY:
Silicon Valley Bank	XtremeSpectrum, Inc., a Delaware Corporation:
By: Chis Must	Ву:
Printed Name: Chris York	Printed Name:
Title: Vice President	Title:

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.

BANK:	COMPANY:
Silicon Valley Bank	XtremeSpectrum, Inc., a Delaware Corporation:
By:	Ву:
Printed Name:	Printed Name: Mstin Reflect
Title:	Title: President and CEO

/2003 17:53 FAX 🖾 010

# EXHIBIT B - Patents (Published) XTREMESPECTRUM, INC. PUBLISHED IP

The following is a list of all of XtremeSpectrum's published patent intellectual property. The list is divided by type of patent intellectual property, as follows:

Issued Patents: These are applications that have currently issued as U.S. patents.

**Allowed Patent Applications:** These are applications that have been allowed by the U.S. Patent Office, but have not yet issued as patents.

**Pending Utility Patent Applications:** These are patent applications that are currently pending in the U.S. Patent Office and have been placed before patent examiners for consideration on their merits.

**Pending PCT Applications:** These are international patent applications filed under the provisions of the Patent Cooperation Treaty. They allow us to defer foreign filing in all countries that are signatories of the treaty.

#### **Issued Patents**

U.S. Patent No. 6,351,246 U.S. Patent No. 6,505,032

## Allowed Patent Applications

Case No.	Serial No.	Title	Filing Date
XSI.002C	10/014,668	Planar Ultra Wide Band Antenna with Integrated Electronics	14-Dec <b>-</b> 01

Page 6 of 13

Pending Utility Patent Applications				
Case No.	Serial No.	Title	Filing Date	
XSI.004	09/685,200	Leakage Nulling Receiver Correlator Structure and Method for Ultra	10-Oct-00	
		Wide Bandwidth Communication System		
XSI.007	09/972,966	Ultra Wide Bandwidth Noise Cancellation Mechanism and Method	10-Oct-01	
XSI,008	09/684,400	Ultra Wideband Communication System, Method, and Device with	10-Oct-00	
		Low Noise Pulse Formation		
XSI.009	09/684,782	Ultra Wideband Communication System, Method, and Device with	10-Oct-00	
		Low Noise Reception		
XSI.010	09/685,195	Ultrawide Bandwidth System and Method for Fast Synchronization	10-Oct-00	
XSI.011	09/685,196	Ultrawide Bandwidth System and Method for Fast Synchronization	10-Oct-00	
		Using Multiple Detection Arms		
XSI.012	09/685,197	Mode Controller for Signal Acquisition and Tracking in an Ultra	10-Oct-00	
		Wideband Communication System		
XSI.013	09/685,198	Analog Signal Separator for UWB Versus Narrowband Signals	10-Oct-00	
XSI.014	09/685,199	A Low Power, High Resolution Timing Generator for Ultra-Wide	10-Oct-00	
		Bandwidth Communications Systems		
XSI.015	09/685,201	Carrierless Ultra Wideband Wireless Signals for Conveying	10-Oct-00	
		Application Data		
XSI.016	09/685,202	Method and System for Enabling Device Functions Based on Distance	10-Oct-00	
		Information		
XSI.017	09/685,203	System and Method for Baseband Removal of Narrowband	10-Oct-00	
		Interference in Ultra Wideband Signals		
XSI.018	09/685,205	System and Method for Generating Ultra Wideband Pulses	10-Oct-00	
XSI.019	09/684,401	Ultrawide Bandwidth System and Method for Fast Synchronization	10-Oct-00	
		Using Sub-code Spins		
XSI.020	10/067,423	MAC Improvements to Wireless Personal Area Networks	7 <b>-</b> Feb-02	
Pending PCT Applications				
Case No.	Serial No.	Title	Filing Date	
XSI.003PCT	PCT/US01/2	1125 Electrically Small Planar UWB Antenna Appratus and System	31-Jul-01	
		Thereof		
XSI.012PCT	PCT/US01/2	7747 Mode Controller for Signal Acquisition and Tracking in an Ultra	2-Oct-01	
		Wideband Communication System		
XSI.013PCT		7746 Analog Signal Separator for UWB Versus Narrowband Signals	2-Oct-01	
XSI.018PCT		7750 System and Method for Generating Ultra Wideband Pulses	2-Oct-01	
XSI.020PCT	PCT/US02/0	3364 MAC Improvements to Wireless Personal Area Networks	7-Feb-02	

j

Page 7 of 13

**PATENT** 

186032v1