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FORM PTO-1595 (MODIFIED)		I FORM COVER	U.S.DEPARTMENT OF COMMERCE		
(Rev. 6-93)	SHEET		Patent and Trademark Office		
OMB No. 0651-0011 (exp. 4/94)		S ONLY	ahad adalahat danmarta ar sanyahan - f		
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.					
1. Name of conveying party(ies):		1	address of receiving party(ies):		
XtremeSpectrum, Inc.		Name:	Granite Ventures, LLC		
8133 Leesburg Pike	. <u>-</u>	Internal Address:			
Suite 700		Address	One Bush Street		
Vienna, Virginia 22182	<u> </u>	Vaniess	One Busin Street		
Additional name(s) of conveying party(ies) attached?	☐ Yes 🏻 No	City: San Franc	sco State: CA Zip: 94104		
3. Nature of conveyance:		Additional name(s) and	<u> </u>		
Assignment Merger		☐ Yes	⊠ No		
Security Agreement	of Name	_			
Other					
Execution Date: February 28, 2003					
]			
4. Application number(s) or patent number(s):				
If this document is being filed together with a	new application, t	he execution date of	the application is:		
A. Patent Application No. (s)		B. Patent No.(s)			
SEE ATTACHED LIST		SEE ATTA	ACHED LIST		
Addi	itional numbers atta	ached? Xes	No		
5. Name and address of party to whom corre	spondence	6. Total number of	applications and patents involved:		
concerning document should be mailed:			23		
Name: Michael J. Bevilacqua, E	isquire	7. Total Fee (37 C	FR 3.41) \$920.00		
Internal Address: Hale and Dorr LLP		☐ Enclosed			
Street Address: 60 State Street		☐ Charge for	ees to Deposit Account		
			fees associated with this paper or during the		
City: Boston State: MA	Zip: 02109		ation, or credit any overpayment, to deposit account.		
		8. Deposit account			
			-0219		
	DO NOT LIST		of this page if paying by deposit account.)		
	DO NOT OSE	E THIS SPACE			
Statement and signature.					
	e foregoino inform	ation is true and core	rect and any attached copy is a true copy of		
the original document		AVI A	i i		
Michael J. Bevilacqua, Esquire	Helan	A Sulary	2/28/03		
Name of Person Signing	Signature	S	Date		
			-		

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

PATENT

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 Wide Bandwidth Communication System	10-Oct-00		
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 Low Noise Pulse Formation	10-Oct-00		
XSI.009	09/684,782	Ultra Wideband Communication System, Method, and Device with Low Noise Reception	10-Oct-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 Using Multiple Detection Arms	10-Oct-00		
XSI.012	09/685,197	Mode Controller for Signal Acquisition and Tracking in an Ultra Wideband Communication System	10-Oct-00		
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 Bandwidth Communications Systems	10-Oct-00		
XSI.015	09/685,201	Carrierless Ultra Wideband Wireless Signals for Conveying Application Data	10-Oct-00		
XSI.016	09/685,202	Method and System for Enabling Device Functions Based on Distance Information	10-Oct-00		
XSI.017	09/685,203	System and Method for Baseband Removal of Narrowband Interference in Ultra Wideband Signals	10-Oct-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 Using Sub-code Spins	10-Oct-00		
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/US01/2	1125 Electrically Small Planar UWB Antenna Appratus and System Thereof	31-Jul-01		
XSI.012PCT	PCT/US01/27	7747 Mode Controller for Signal Acquisition and Tracking in an Ultra Wideband Communication System	2-Oct-01		
XSI.013PCT	PCT/US01/27	7746 Analog Signal Separator for UWB Versus Narrowband Signals	2-Oct-01		
XSI.018PCT	PCT/US01/27	7750 System and Method for Generating Ultra Wideband Pulses	2-Oct-01		
XSI.020PCT	PCT/US02/03	3364 MAC Improvements to Wireless Personal Area Networks	7-Feb-02		

PATENT REEL: 013447 FRAME: 0517

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of February _28, 2003 by and between:

Granite Ventures, LLC, a limited liability company, having its principal place of business at One Bush Street, San Francisco, CA 94104, individually and in its capacity as agent for the other Lenders ("Agent"); and

XtremeSpectrum, Inc., a Delaware corporation with a principal place of business located at 8133 Leesburg Pike, Suite 700, Vienna, VA 22182 ("Company").

RECITALS

- Pursuant to that certain Subordinated and Convertible Secured Note and Warrant Purchase Agreement of even date herewith between Company, Agent and the other parties thereto (as amended and in effect from time to time, the "Credit Agreement"), Lenders have agreed to make certain advances of money and to extend certain financial accommodations to Company in the amounts and manner set forth in the Credit Agreement.
- In order to induce the Lenders to enter into the Credit Agreement and advance money to Company thereunder, Company has agreed to grant to Agent, individually and in its capacity as agent for the other Lenders, a security interest in certain Copyrights, Patents, and Trademarks to secure the obligations of Company under the Credit Agreement and as specified in that certain Security Agreement of even date herewith between Company, Agent and the other parties thereto (the "Security Agreement").
- C. Capitalized terms used but not defined herein shall have the meanings ascribed to such terms in the Credit Agreement and/or the Security Agreement.
- D. Pursuant to the terms of the Credit Agreement and Security Agreement, Company has granted to Agent 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 Credit Agreement and Security Agreement, Company hereby represents, warrants, covenants and agrees as follows:

PATER 1 of 13

<u>AGREEMENT</u>

- 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.
- (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 Credit Agreement and Security Agreement, Company grants and pledges to Agent 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 Agent under the Security Agreement. The rights and remedies of Agent with respect to the security interest granted hereby are in addition to those set forth in the Credit Agreement and the Security Agreement, and those which are now or hereafter available to Agent as a matter of law or equity. Each right, power and remedy of Agent provided for herein or in the Credit Agreement or the Security 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 Agent of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Credit Agreement or the Security Agreement, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Agent, of any or all other rights, powers or remedies.
- 4. 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.

PATENTE 2 of 13

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 Exhibits B or any improvement on any such Patent, or (c) obtain rights to any new Trademarks, the Company shall give to the Agent 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

- 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 Credit Agreement and the Security Agreement which, taken together, set forth the complete understanding and agreement of Agent, Lenders 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 Agent, for the benefit of Agent and Lenders, hereunder, inure to the benefit of Agent and Lenders, 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 Agent, for the benefit of Agent and Lenders, hereunder. 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.

{Signatures begin on 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.

AGENT:	COMPANY:		
Granite Ventures, LLC a limited liability company:	XtremeSpectrum, Inc., a Delaware Corporation:		
Ву:	Ву:		
Printed Name:	Printed Name: Markin Roftert		
Title:	Title: freshort and CEO		

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.

AGENT:	COMPANY:		
Granite Ventures, LLC	XtremeSpectrum, Inc.,		
a limited liability company:	a Delaware Corporation:		
By: Julet	Ву:	-	
Printed Name: Jackie Berterretche	Printed Name:		
Managing Director	<u></u> .		

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

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

Allowed Patent Applications

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

RECORDED: 02/28/2003

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	40.0.00	
XSI.015	09/685,201	Carrierless Ultra Wideband Wireless Signals for Conveying	10-Oct-00	
		Application Data	10.0.100	
XSI.016	09/685,202	Method and System for Enabling Device Functions Based on Distance	10-Oct-00	
	60460 - 600	Information	10.0 + 00	
XSI.017	09/685,203	System and Method for Baseband Removal of Narrowband	10-Oct-00	
		Interference in Ultra Wideband Signals	10.0 . 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	
TTGT 000	101065 100	Using Sub-code Spins	7 E.L. 00	
XSI.020	10/067,423	MAC Improvements to Wireless Personal Area Networks	7-Feb-02	
n12 n.cm				
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XSI,003PCT		1125 Electrically Small Planar UWB Antenna Appratus and System	31-Jul-01	
A51,0051 C1	1 C1/0501/2	Thereof	51 301 01	
XSI,012PCT	PCT/US01/2	7747 Mode Controller for Signal Acquisition and Tracking in an Ultra	2-Oct-01	
7.01.0121.01	101/0501/2	Wideband Communication System	2 001 01	
XSI.013PCT	PCT/US01/2	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		3364 MAC Improvements to Wireless Personal Area Networks	7-Feb-02	
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