TRADEMARK ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
PICOSECOND PULSE LABS, INC.		06/08/2011	CORPORATION: DELAWARE

RECEIVING PARTY DATA

Name:	SILICON VALLEY BANK
Street Address:	3003 Tasman Drive
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95054
Entity Type:	CORPORATION: CALIFORNIA

PROPERTY NUMBERS Total: 3

Property Type	Number	Word Mark
Serial Number:	85123695	PICOSECOND PULSE LABS
Serial Number:	85245786	PATTERNPRO
Serial Number:	85245779	THINK OUTSIDE THE BERT

CORRESPONDENCE DATA

Fax Number: (858)550-6420

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 858-550-6403

Email: erin.obrien@cooley.com

Correspondent Name: Erin O'Brien
Address Line 1: c/o Cooley LLP
Address Line 2: 4401 Eastgate Mall

Address Line 4: San Diego, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER: 194	94491-1384 PICOSECOND
NAME OF SUBMITTER: Erir	rin O'Brien

TRADEMARK REEL: 004565 FRAME: 0051 85123695

900194822

Signature:	/Erin O'Brien/
Date:	06/15/2011
Total Attachments: 17 source=Picosecond signed IPSA and amend source=Picosecond signed	dments#page2.tif dments#page4.tif dments#page5.tif dments#page6.tif dments#page7.tif dments#page8.tif dments#page8.tif dments#page9.tif dments#page10.tif dments#page11.tif dments#page12.tif dments#page15.tif dments#page15.tif
source=Picosecond signed IPSA and amend source=Picosecond signed IPSA and amend	. •

ADDENDUM TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Addendum To Intellectual Property Security Agreement is executed pursuant to, and is an addendum to, an Intellectual Property Security Agreement, dated January 30, 2004. This Addendum to Intellectual Property Security Agreement is presented for recordation as constructive notice that PICOSECOND PULSE LABS, INC., a Delaware corporation ("Assignor"), with its principal office at 2500 55th Street, Boulder, CO 80301, the owner of the intellectual property identified in the exhibits attached hereto, has granted to Silicon Valley Bank ("Assignee"), with its principal office at 3003 Tasman Drive, Santa Clara, CA 95054, a security interest in the intellectual property, and the exclusive rights comprised in the intellectual property, to secure payment of a debt.

In Witness Whereof, Assignor has executed this Addendum to Intellectual Property Security Agreement as of June 2, 2011.

PICOSEC	COND PULSE LABS, INC.		
Ву:	MAN Silver		
Name:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,	11412
Title:	<u> </u>		

Ì.

Exhibit "B" attached to that certain Addendum to Intellectual Property Security Agreement dated June &, 2011.

Exhibit B PATENTS

Title	Serial / Patent Number	Filing / Issue Date
Waveguide samplers and frequency converters	7,734,271	06/08/10
Ultrafast sampler with coaxial transition	7,612,628	11/03/09

Exhibit "C" attached to that certain Addendum to Intellectual Property Security Agreement dated June 7, 2011.

Exhibit C TRADEMARKS

Description	Serial / Registration Number	Application / Registration Date
PICOSECOND PULSE LABS	85/123,695	09/07/10
PATTERNPRO	85/245,786	02/18/11
THINK OUTSIDE THE BERT	85/245,779	02/18/11

1.

SECOND AMENDMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS SECOND AMENDMENT to Intellectual Property Security Agreement (this "Amendment") is entered into to be effective the 27th day of April, 2010, by and between Silicon Valley Bank ("Bank") and Picosecond Pulse Labs, Inc., a Delaware corporation ("Borrower").

RECITALS

- A. Bank and Borrower have entered into that certain Intellectual Property Security Agreement dated as of January 30, 2004, as amended by a First Amendment, dated January 30, 2008 (as the same may from time to time be amended, modified, supplemented or restated, the "IP Agreement"), pursuant to which Borrower has granted Bank a security interest in all of Borrower's Intellectual Property.
- B. Borrower has requested that Bank amend the IP Agreement to add additional Trademarks to Exhibit C thereof.
- C. Bank has agreed to so amend certain provisions of the IP Agreement, but only to the extent, in accordance with the terms, subject to the conditions and in reliance upon the representations and warranties set forth below.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

- 1. Definitions. Capitalized terms used but not defined in this Amendment shall have the meanings given to them in the IP Agreement.
- 2. Amendment to IP Agreement. Exhibit B to the IP Agreement is hereby deleted in its entirety and replaced with Exhibit A to this Amendment.
 - 3. Limitation of Amendment.
- 3.1 The amendment set forth in Section 2, above, are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any other amendment, waiver or modification of any other term or condition of the IP Agreement, or (b) otherwise prejudice any right or remedy which Bank may now have or may have in the future under or in connection with the IP Agreement.
- 3.2 This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.
- 4. Counterparts. This Amendment may be executed in any number of counterparts and all of such counterparts taken together shall be deemed to constitute one and the same instrument.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered as of the date first written above.

BANK:

SILICON VALLEY BANK

BORROWER:

PICOSECOND PULSE LABS, INC.

Name:

ille: CFO and UP Finance

EXHIBIT A

EXHIBIT B

Patents

Description	Inventor Names	Application/ Registration Number	Application/Registration <u>Date</u>
Ultrafast sampler with non-parallel shockline	Agoston, et	7170365	1/30/2007
Ultrafast sampler with non-parallel shockline	Agoston, et al	6900710	5/31/2005
Ultrafast sampler with coaxial transition	Agoston, et al	7084716	8/1/2006
Transmission Line Voltage Controlled Nonlinear Signal Processors	Pepper, et al	7358834	4/15/2008
Biased Nonlinear Transmission Line Comb Generators	Pepper	7612629	11/3/2009

FIRST AMENDMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS FIRST AMENDMENT to Intellectual Property Security Agreement (this "Amendment") is entered into to be effective the 30th day of January, 2008, by and between Silicon Valley Bank ("Bank") and Picosecond Pulse Labs, Inc., a Delaware corporation ("Borrower").

RECITALS

- A. Bank and Borrower have entered into that certain Intellectual Property Security Agreement dated as of January 30, 2004 (as the same may from time to time be amended, modified, supplemented or restated, the "IP Agreement"), pursuant to which Borrower has granted Bank a security interest in all of Borrower's Intellectual Property.
- B. Borrower has requested that Bank amend the IP Agreement to add additional Trademarks to Exhibit C thereof.
- C. Bank has agreed to so amend certain provisions of the IP Agreement, but only to the extent, in accordance with the terms, subject to the conditions and in reliance upon the representations and warranties set forth below.

AGREEMENT

- Now, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:
- 1. Definitions. Capitalized terms used but not defined in this Amendment shall have the meanings given to them in the IP Agreement.
- 2. Amendment to IP Agreement. Exhibit B to the IP Agreement is hereby deleted in its entirety and replaced with Exhibit A to this Amendment.

3. Limitation of Amendment.

- 3.1 The amendment set forth in Section 2, above, are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any other amendment, waiver or modification of any other term or condition of the IP Agreement, or (b) otherwise prejudice any right or remedy which Bank may now have or may have in the future under or in connection with the IP Agreement.
- 3.2 This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.
- 4. Counterparts. This Amendment may be executed in any number of counterparts and all of such counterparts taken together shall be deemed to constitute one and the same instrument.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered as of the date first written above.

BANK:

SILICON VALLEY BANK

By: ___

Title: _

: Relationship

BORROWER:

PICOSECOND PULSE LABS, INC.

Name:

Title:

EXHIBIT A

EXHIBIT B

Patents

Description	Inventor Names	Application/ Registration Number	Application/Registration Date
Ultrafast sampler with non-parallel shockline	Agoston, et al	7170365	1/30/2007
Ultrafast sampler with non-parallel shockline	Agoston, et al	6900710	5/31/2005
Ultrafast sampler with coaxial transition	Agoston, et al	7084716	8/1/2006

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of the Effective Date by and between SILICON VALLEY BANK ("Bank") and Picosecond Pulse Labs, Inc. ("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 the Effective Date (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). Bank is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks, Patents, and Mask Works to secure the obligations of Grantor under the Loan Agreement.

B. 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, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement, 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 Collateral (including without limitation those Copyrights, Patents, Trademarks and Mask Works listed on Schedules A, B, C, and D 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.

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.

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

Address of Grantor:	Picosecond Pulse Labs, Inc.
2500 55th Street Boulder, CO 80301 Attn: T. Scott Andrews	By:
CEO	BANK:
Address of Bank:	SILICON VALLEY BANK
4410 Arapahoe Ave., Ste. 200 Boulder, CO 80303	By: Noril North
Attn.	•

GRANTOR:

EXHIBIT A

Qopyrights

Description	Registration/ Application Number	Registration/ Application <u>Date</u>
Low-pass risetime filters for time domain applications: application note AN-7A.	VA1057124	June 10, 1999
10 PS risetime transmission & TDR measurements using the PSPL 4015B 15 PS pulse generator & HP 54124A 50 GHZ oscilloscope.	VA537362	August 21, 1992
10 PS Risetime TDR & transmission measurements using the HP 54120 oscilloscope & PSPL 4015B pulse generator.	VA514167	October 15, 1991
Comparison of ultra-fast rise sampling oscilloscopes.	VA342690	March 27, 1989
₹ D R, step response & "S" parameter measurements in time domain.	VA342689	March 27, 1989
Pulse measurements in the Picosecond domain.	VA342274	Nov 21, 1988

V3508 D/24 Page 3

EXHIBIT B

Patents

Description

Registration/ Application Number Registration/ Application Date

SEE ATTACHED

Picosecond Pulse Labs, Inc. Patents

LICENSED PATENTS (All Licensed Patents are non-assignable)

V3508 D724 Page 4

Picosecond Pulse Labs, Inc Patents

- 1. US Patent Application 10/053,529 Ultrafast Sampler with Non-Parallel Shockline, 14 Independent Claims, 52 Total Claims
- 2. PCT International Application PCT/US02/35239 Ultrafast Sampler With Non-Parallel Shockline, 14 Independent Claims, 52 Total Claims.
- 3. US Patent Application 09/833,015 Ultrafast Sampler with Coaxial Transition, 10 Independent Claims, 33 Total Claims
- 4. PCT International Application PCT/US02/11487 Ultrafast Sampler with Coaxial Transition, 10 Independent Claims, 33 Total Claims
- 5. US Patent Application 10/233,290 Transmission Line Voltage Controlled Nonlinear Signal Processor, 14 Independent Claims, 42 Total Claims

CONFIDENTIAL

Property of Picosecond Pulse Labs, Inc.

V3508 D724 Page 5

V3508 D724 Page

LICENSED PATENTS

STANFORD Patents:

U.S. Patent 5,014,018, Nonlinear Transmission Line for Generation of Picosecond Electrical Transients, issued May 7, 1991.

U.S. Patent 5,256,996, Integrated coplanar strip nonlinear transmission line, issued October 26, 1993.

U.S. Patent 5,378,939, Gallium arsenide monolithically integrated sampling head using equivalent time sampling having a bandwidth greater than 100 Ghz, issued January 3, 1995.

U.S. Patent 5,267,020, Gallium arsenide monolithically integrated sampling head using equivalent time sampling having a bandwidth greater than 100 Ghz, issued November 30, 1993.

HP Patents:

U.S. Patent 4,956,568, Monolithic Sampler, issued September 11, 1990.

All patents issuing from European Patent Application, Serial No. 0-89312458.6, *Monolithic Sampler*, filed 11/30/89.

All patents issuing from Japanese Patent Publication No. 02-212773, Serial No. 01.320429, Monolithic Sampler, filed 12/8/89.

CONFIDENTIAL

Property of Picosecond Pulse Labs, Inc.

Description

Registration/ Application <u>Number</u> Registration/ Application Date

PICOSECOND PULSE LABS

76/415029

May 30, 2002

V3508 D724 Page

EXHIBIT D

Mask Works

Description

N/A

Registration/ Application Number Registration/ Application Date

V3508 D724 Page 8

TRADEMARK REEL: 004565 FRAME: 0069

RECORDED: 06/15/2011