

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM409845

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
LIGHTPATH TECHNOLOGIES, INC.		12/21/2016	Corporation: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	AVIDBANK		
<b>Street Address:</b>	50 West San Fernando Street, Suite 850		
<b>City:</b>	San Jose		
<b>State/Country:</b>	CALIFORNIA		
<b>Postal Code:</b>	95113		
<b>Entity Type:</b>	Corporation: CALIFORNIA		
<b>PROPERTY NUMBERS Total: 3</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	2639210	LIGHTPATH TECHNOLOGIES	
<b>Registration Number:</b>	2106549	LIGHTPATH	
<b>Registration Number:</b>	2058044	GRADIUM	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	6506440520		
<i>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.</i>			
<b>Phone:</b>	6506483802		
<b>Email:</b>	patty@pattycheng.com		
<b>Correspondent Name:</b>	Patty Cheng		
<b>Address Line 1:</b>	2625 MIDDLEFIELD ROAD, SUITE 215		
<b>Address Line 4:</b>	Palo Alto, CALIFORNIA 94306		
<b>NAME OF SUBMITTER:</b>	Patty Cheng		
<b>SIGNATURE:</b>	/s/ Patty Cheng		
<b>DATE SIGNED:</b>	12/21/2016		
<b>Total Attachments: 6</b>			
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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

**THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT** is entered into as of December 21, 2016 by and between **LIGHTPATH TECHNOLOGIES, INC.**, a Delaware corporation ("**Grantor**") and **AVIDBANK**, a California corporation ("**Bank**").

### RECITALS

Bank has agreed to make certain advances of money and to extend certain financial accommodations to Grantor in the amounts and manner set forth in that certain Second Amended and Restated Loan and Security Agreement by and between Bank and Grantor (as amended from time to time, the "**Loan Agreement**") dated of even date herewith. Capitalized terms used herein have the meaning assigned in the Loan Agreement. Bank is willing to continue to make the financial accommodations to Grantor, but only upon the condition, among others, that Grantor grants to Bank a security interest in all of Grantor's right title, and interest in, to and under all of the Collateral whether presently existing or hereafter acquired.

**NOW, THEREFORE**, Grantor agrees as follows:

### AGREEMENT

To secure performance of Grantor's obligations under the Loan Agreement, Grantor grants to Bank a security interest in all of Grantor's right, title and interest in Grantor's intellectual property (including without limitation those Copyrights, Patents and Trademarks listed on Exhibits A, B and C hereto), 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). This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. Each right, power and remedy of Bank provided for herein or in the Loan Agreement shall not preclude the simultaneous or later exercise by Bank of any or all other rights, powers or remedies.

This 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. In the event that any signature to this Agreement is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original thereof.


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

Address of Grantor:

2603 Challenger Tech Ct., Suite 100  
Orlando, Florida 32826  
Attn: J. James Gaynor

**LIGHTPATH TECHNOLOGIES, INC.**

By:   
Print Name: J. James Gaynor  
Title: CEO

Address of Bank:

50 West San Fernando Street, Suite 850  
San Jose, California 95113  
FAX: 408-200-7399  
Attn: Stephen Chen

**AVIDBANK**

By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**TRADEMARK**

**REEL: 005950 FRAME: 0361**

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

Address of Grantor:

2603 Challenger Tech Ct., Suite 100  
Orlando, Florida 32826  
Attn: \_\_\_\_\_

LIGHTPATH TECHNOLOGIES, INC.

By: \_\_\_\_\_

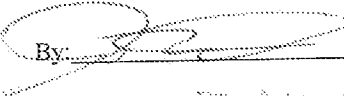
Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address of Bank:

50 West San Fernando Street, Suite 850  
San Jose, California 95113  
FAX: 408-200-7399  
Attn: Stephen Chen

AVIDBANK

By:  \_\_\_\_\_

Print Name: DON KRAGSTAD

Title: SVP

**EXHIBIT A**

**Copyrights**

Please Check Box if No Copyrights Exist

<b>Title</b>	<b>Registration Number</b>	<b>Registration Date</b>
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**EXHIBIT B  
Patents**

Please Check Box if No Patents Exist

<b>Title</b>	<b>Serial/ Patent Number</b>	<b>Application/ Issue Date</b>
High-power fused collimator and associated methods	7,397,985	07/08/08
High-power fused collimator and associated methods	7,146,075	12/05/06
Computer keyboard backlighting	6,871,978*	03/29/05
Fabrication of collimators employing optical fibers fusion-spliced to optical elements of substantially larger cross-section areas	6,780,274*	08/24/04
Backlighting for computer keyboard	6,765,503*	07/20/04
Fabrication of collimators employing optical fibers fusion-spliced to optical elements of substantially larger cross-sectional areas	6,360,039*	03/19/02
Manipulation of acoustic waves using a functionally graded material and process for making the same	6,278,656*	08/21/01
Use of a laser to fusion-splice optical components of substantially different cross-sectional areas	6,217,698*	04/17/01
Use of a laser to fusion-splice optical components of substantially different cross-sectional areas	6,033,515*	03/07/00
Batching of molten glass in the production of graded index of refraction glass bodies	6,029,475*	02/29/00
Method of producing large polymer optical blanks with predictable axial refractive index profile	6,027,672*	02/22/00
Axially-graded index-based couplers for solar concentrators	5,936,777*	08/10/99
Method of manufacturing a grin lens	5,917,105*	06/29/99
Axially-graded index-based couplers	5,815,318*	09/29/98
Quadaxial gradient index lens	5,796,525*	08/18/98
GRIN lens and method of manufacturing	5,689,374*	11/18/97
Process for manufacturing GRIN lenses by melting a series of layers of frits	5,630,857*	05/20/97
Gradient refractive index lens elements	5,617,252*	04/01/97
Method for making refractive optical elements with graded properties	5,582,626*	12/10/96
Lead glass composition series for gradient glasses	5,504,623*	04/02/96
Lead glass composition series for gradient glasses	5,459,613*	10/17/95
Refractive elements with graded properties and methods of making same	5,262,896*	11/16/93
Shaped gradient fabrication in lenses by molding from axial gradient	5,236,486*	08/17/93
Uni-directional gradient index of refraction glasses	5,200,858*	04/06/93
Use of a laser to fusion-splice optical components of substantially different cross-sectional areas	6,352,376*	03/05/02
Macro-gradient optical density transmissive light concentrators, lenses and compound lenses of large geometry	4,907,864*	03/13/90
Double axial gradient lens and process for fabrication thereof	5,044,737*	09/03/91
Glass plate fusion for macro-gradient refractive index materials	4,929,065*	05/29/90
Fabrication of macro-gradient optical density transmissive light concentrators, lenses and compound lenses of large geometry	4,883,522*	11/28/89
Method of microfabrication	6,126,775*	10/03/00
Method of micro-fabrication	6,395,126*	05/28/02
Temperature compensator for faraday rotator	6,252,708*	06/26/01
TV projection lens including a graded index element	5,392,431*	02/21/95
Process for manufacturing grin lenses	5,992,179*	05/19/19
1 x N optical switch	6,031,947*	06/05/98

\*Indicates dead, abandoned or cancelled patent

**EXHIBIT C**

**Trademarks**

Please Check Box if No Trademarks Exist

<u>Description</u>	<u>Serial / Registration Number</u>	<u>Application /Registration Date</u>
LIGHTPATH TECHNOLOGIES	2639210	October 22, 2002
POLYCOAT	2734650	July 8, 2003*
VECTRA	2774868	October 21, 2003*
LIGHTPATH	2106549	October 21, 1997
GRADIUM	2058044	April 29, 1997
LIGHTCHIP	74661500	April 14, 1995*
LIGHTPATH	74476114	January 4, 1994*
LIGHTPATH	1857388	October 4, 1994*

\*Indicates dead, abandoned or cancelled trademark