

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3586281

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
NANOLUMENS ACQUISITION INC.	07/30/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	PACIFIC WESTERN BANK (AS SUCCESSOR IN INTEREST BY MERGER TO SQUARE 1 BANK)
<b>Street Address:</b>	406 BLACKWELL STREET
<b>Internal Address:</b>	SUITE 240
<b>City:</b>	DURHAM
<b>State/Country:</b>	NORTH CAROLINA
<b>Postal Code:</b>	27701
<b>PROPERTY NUMBERS Total: 6</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	8963895
Patent Number:	D711874
Patent Number:	9159707
Application Number:	14627008
Application Number:	14712272
Application Number:	14678435
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(919)354-1278
<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>	919-314-3086
<b>Email:</b>	loandocsdept@square1bank.com
<b>Correspondent Name:</b>	PACIFIC WESTERN BANK
<b>Address Line 1:</b>	406 BLACKWELL STREET
<b>Address Line 2:</b>	SUITE 240
<b>Address Line 4:</b>	DURHAM, NORTH CAROLINA 27701
<b>NAME OF SUBMITTER:</b>	NICHOLAS NANCE
<b>SIGNATURE:</b>	/NICHOLASNANCE-TKF/
<b>DATE SIGNED:</b>	10/26/2015

**Total Attachments: 7**

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## **INTELLECTUAL PROPERTY SECURITY AGREEMENT**

**THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT** is entered into as of July 30, 2013 by and between **SQUARE 1 BANK** (“**Bank**”) and **NANOLUMENS ACQUISITION INC.**, a Georgia corporation (“**Grantor**”).

### **RECITALS**

**A.** Bank has agreed to make certain advances of money and to extend certain financial accommodations to Grantor (the “Loans”) in the amounts and manner set forth in that certain Loan and Security Agreement by and between Bank, Grantor, and NanoLumens, Inc. dated July 25, 2013 (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.** Bank is willing to extend and to continue to extend financial accommodations to Grantor, but only upon 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 its Obligations to Bank, 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.

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 that Exhibits A, B, and C attached hereto set forth any and all intellectual property rights in connection to which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

**SIGNATURE PAGE FOLLOWS**

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IN WITNESS WHEREOF, each party has caused this Intellectual Property Security Agreement to be duly executed by an officer thereunto duly authorized as of the first date written above.

**GRANTOR:**

Address of Grantor:

**NANOLUMENS ACQUISITION INC.**

4900 Avalon Ridge Parkway  
Norcross, GA 30071


By:   
Name: Richard Cope  
Title: President and CEO

**BANK:**

Address of Bank:

**SQUARE 1 BANK**

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

By:   
Name: Zach Robbins  
Title: AVP

*[Signature Page to Intellectual Property Security Agreement]*

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**EXHIBIT A**  
**COPYRIGHTS**

<b>Description</b>	<b>Registration Number</b>	<b>Registration Date</b>
None		

**EXHIBIT B**  
**PATENTS**

<b>Description</b>	<b>Registration OR Serial Number</b>	<b>Registration OR Filing Date</b>
Doped amorphous and crystalline gallium oxides, alkaline earth gallates and doped zinc germanate phosphors as electroluminescent materials	5725801 Dead	03/10/1998
Doped amorphous and crystalline gallium oxides alkaline earth gallates and doped zinc germanate phosphors as electroluminescent materials	5897812 dead	04/27/1999
Oxide phosphor electroluminescent laminate	6403204 dead	06/11/2002
Capacitively switched matrixed el display	7133009 dead	11/07/2006
Europium-doped gallium-indium oxides as red emitting electroluminescent phosphor materials	10552452 dead	12/22/2006
Sphere-supported thin film phosphor electroluminescent devices	10570516 dead	10/25/2006
Electroluminescent Display Apparatus and Methods	11535377 dead	09/26/2006
Dynamic vehicle display system	11681250 dead	03/02/2007
Systems and Methods for Front Contacts for Electroluminescent Apparatus and Flexible Display	11681960 dead	03/05/2007
Electroluminescent Nixels and Elements with Single-Sided Electrical Contacts	11683489 dead	03/08/2007
Vehicle with Interior Video Display for Exterior View	11743299 dead	05/02/2007
Voltage partitioned display	11779802 dead	07/18/2007
Hybrid display	11832786 dead	08/02/2007
Emissive movie theater display	11834189 dead	08/06/2007
Flexible display	9013367 12348158	04/21/2015 01/02/2009
Lightweight unitary display	9058755	06/16/2015

	13231950	09/13/2011
Systems for Facilitating Virtual presence	13297784	11/16/2011
Mobile, Personsize Display System and Method of Use	9071809	06/30/2015
	13494012	06/11/2012
Retractable digital display system and method of use	13915485	06/11/2013
Digital display	D701507	03/25/2014
Ubiquitously mountable image display system	8963895	02/24/2015
Digital display	D711874	08/26/2014
Ubiquitously mountable image display system	14627008	02/20/2015
Flexible Display	9159707	10/13/2015
Lightweight unitary display	14712272	05/14/2015
Flexible Display	14678435	04/03/2015



**EXHIBIT C**  
**TRADEMARKS**

<b>Description</b>	<b>Registration/ Application Number</b>	<b>Registration/ Application Date</b>
None		

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