

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4107996

<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>
SIGMA LABS, INC.	10/17/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	L1 CAPITAL GLOBAL OPPORTUNITIES MASTER FUND LTD. AS COLLATERAL AGENT
<b>Street Address:</b>	101 COLLINS STREET
<b>Internal Address:</b>	LEVEL 51
<b>City:</b>	MELBOURNE, VICTORIA
<b>State/Country:</b>	AUSTRALIA
<b>Postal Code:</b>	3000
<b>PROPERTY NUMBERS Total: 10</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14832691
Application Number:	14870914
Application Number:	14945247
Application Number:	14955183
PCT Number:	US2015148702
PCT Number:	US2016115284
PCT Number:	US2016081651
Application Number:	62235232
Application Number:	62311318
PCT Number:	US2016185048
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(561)686-5442
<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>	561-227-4558
<b>Email:</b>	wseifert@nasonyeager.com
<b>Correspondent Name:</b>	MICHAEL D. HARRIS, ESQ.
<b>Address Line 1:</b>	3001 PGA BOULEVARD
<b>Address Line 2:</b>	SUITE 305

<b>Address Line 4:</b> PALM BEACH GARDENS, FLORIDA 33410	
<b>ATTORNEY DOCKET NUMBER:</b>	10796.24594
<b>NAME OF SUBMITTER:</b>	MICHAEL D. HARRIS, ESQ.
<b>SIGNATURE:</b>	/mdh/
<b>DATE SIGNED:</b>	10/21/2016
<b>Total Attachments: 12</b> source=Security Agreement#page1.tif source=Security Agreement#page2.tif source=Security Agreement#page3.tif source=Security Agreement#page4.tif source=Security Agreement#page5.tif source=Security Agreement#page6.tif source=Security Agreement#page7.tif source=Security Agreement#page8.tif source=Security Agreement#page9.tif source=Security Agreement#page10.tif source=Security Agreement#page11.tif source=Security Agreement#page12.tif	

## **SECURITY AGREEMENT**

This Security Agreement (the "Agreement") is entered into as of this 17<sup>th</sup> day of October, 2016 by and between Sigma Labs, Inc., a Nevada corporation (the "Borrower"), and L1 Capital Global Opportunities Master Fund Ltd, in its capacity as Collateral Agent (together with its successors and assigns in such capacity, the "Secured Party") for the benefit of itself and each of the Purchasers, as defined in the Securities Purchase Agreement by and among the Borrower and each of the Purchasers as of the date of this Agreement (the "SPA").

WHEREAS, the Purchasers have agreed to lend certain funds to the Borrower (the "Loan"), and the Borrower desires to borrow such funds from the Purchasers.

WHEREAS, in order to induce the Purchasers to make the Loan, the Borrower has agreed to grant a security interest in certain tangible and intangible property to the Secured Party for purposes of securing the obligations of the Borrower to the Purchasers.

NOW, THEREFORE, the parties hereto agree as follows:

1. Creation of Security Interest. In connection with the issuance by the Borrower of the Notes, as defined in the SPA, and as consideration for the Purchasers' advance of funds thereunder, the Borrower hereby grants to the Secured Party a security interest in the Collateral described in Section 2 to secure the performance or payment of all of the obligations of the Borrower under Section 3.

2. Collateral. The collateral of this Agreement (the "Collateral") consists of the items described on attached Exhibit A, including the Physical Collateral and the Patent Collateral, as defined in Exhibit A. Notwithstanding anything to the contrary herein, the obligations under Section 3(b) and Section 4 of this Agreement will not be deemed to apply to cash that is part of the Collateral.

3. The Borrower's Obligations.

(a) Obligation to Pay. The Borrower shall pay to the Purchasers \$1,000,000 and accrued interest thereon in accordance with the terms of the Notes.

(b) Additional Obligations.

(i) Protection of Collateral. The Physical Collateral:

(1) will not be misused or abused, but will be maintained in good and operable condition, reasonable wear and tear excepted (except for any loss, damage or destruction which is fully covered by insurance proceeds) and will be repaired, renewed and replaced by the Borrower, in the exercise of reasonable discretion, as the Borrower shall deem necessary;

(2) will be insured by the Borrower in the amount of at least \$1,000,000 until this Agreement is terminated against all expected risks to which it is exposed, including fire, theft, wind and flood, and those which the Secured Party may reasonably designate, with the policies reasonably acceptable to the Secured Party, and providing for 30 days' minimum cancellation notice

to the Secured Party, and with certificates evidencing such insurance delivered to the Secured Party within ten days following the making of the Loans. The Borrower agrees to apply any such insurance proceeds to the replacement or repair of any damaged Collateral and, to the extent the Borrower does not do so within sixty days after receiving such proceeds, the Borrower will apply the proceeds to the Notes.

(ii) Protection of Security Interest.

(1) The Collateral will not be sold, licensed, transferred, encumbered, pledged, or disposed of or be subjected to any unpaid charge, including taxes, or to any subsequent interest of a third person created or suffered by the Borrower voluntarily or involuntarily, unless the Secured Party consents in advance in writing to such charge, transfer, disposition or subsequent interest, *provided, however*, that the Collateral may be sold, leased or licensed to third parties in the ordinary course of the Borrower's business, and

(2) Upon the making of the Loan, the Secured Party will file a Financing Statement with the Nevada Secretary of State and, upon notice to the Borrower, may file additional Financing Statements it deems necessary in places it deems appropriate to protect the security interest under this Agreement against the rights or interests of third persons.

(3) Any proceeds received by the Borrower upon the sale, lease, license, assignment, transfer, encumbrance, pledge or other disposition of any of the Collateral or any part thereof shall be paid to the Secured Party when received and applied to the Notes of the Purchasers on a pro rata basis (based on the amount of each Loan) until all principal, accrued interest and attorneys' fees outstanding under the Notes are paid in full. All additional proceeds, if any, from such sale or other disposition shall be retained by the Borrower. Notwithstanding anything to the contrary in this Agreement, all proceeds from selling, leasing and licensing the Collateral in the ordinary course of the Borrower's business shall be retained by the Borrower.

4. Representations, Warranties and Covenants. The Borrower represents, warrants and covenants to the Secured Party that:

(i) The Borrower has good and sufficient title to the Collateral that is material to the business of the Company, free and clear of all security interests, liens, encumbrances and claims whatsoever, other than those created in favor of the Secured Party, and except for Liens (as defined in the SPA) permitted under the SPA.

(ii) To the knowledge of the Borrower, no financing statement, notice of lien, security agreement or any other agreement or instrument creating or giving notice of an encumbrance or charge against any of the Collateral is in existence or on file in any public office, except those in favor of Secured Party.

(iii) The Borrower will at all times hereafter keep the Collateral free of all security interests, liens and claims whatsoever, except for the security interests, liens and claims in favor of the Secured Party, and except for Liens permitted under the SPA.

(iv) The Borrower (i) will, from time to time, on the reasonable request of the Secured Party, execute such financing statements, statements of assignment, notices and other

documents and pay the costs of filing or recording the same in all public offices deemed necessary by the Secured Party and do such other reasonable acts as the Secured Party may request to establish and maintain a valid security interest in the Collateral at the Borrower's expense and to file any financing statements, or any notices or assignments with the Patent and Trademark Office, relating to the Collateral (without the Borrower's signature thereon) which the Secured Party deems reasonably appropriate.

(v) the Borrower irrevocably appoints the Secured Party as the Borrower's attorney-in-fact during the existence of an Event of Default (as defined in the Notes) with full power of substitution, in its own name or in the Borrower's name, place and stead:

(1) To file any financing statements, and any documents in the Patent and Trademark Office that the Secured Party deems appropriate in connection with the perfection, protection, priority or enforcement of the Secured Party's security interest in the Collateral;

(2) To take any actions required of the Borrower under this Agreement that the Borrower fails or is unable to take in a timely manner; and

(3) While the Borrower is in default under this Agreement, to take any actions that the Secured Party deems reasonably appropriate (i) to protect, preserve or realize upon the Collateral and its security interest in the Collateral or to accomplish the purposes of this Agreement, including any actions described in Section 6 and (ii) in connection with the disposition of any Collateral (1) to assign or transfer title to such Collateral to itself or to any third party purchaser in connection with the Secured Party's exercise of its rights under the Uniform Commercial Code, and (2) to file with the Patent and Trademark Office or other governmental office or authority any documents necessary or advisable to implement, effectuate or reflect the disposition.

(4) The Secured Party will not disturb the rights of any third-party licensee or lessee of the Patent Collateral under a license or lease granted by the Borrower in the ordinary course of business so long as the licensee or lessee, as applicable, is not in breach of its obligations to the Borrower under the license or lease.

Except where prior notice is expressly required by the terms of this Agreement, the Secured Party shall use commercially reasonable efforts to provide notice to the Borrower prior to taking any action taken under this Section 4(v), provided that failure to deliver such notice shall not limit the Secured Party's right to take such action or the validity of any such action.

(vi) Except as otherwise provided herein, the Borrower will account fully and faithfully for and promptly pay or turn over to the Secured Party proceeds in whatever form received in disposition in any manner of any of the Collateral as provided herein.

(vii) All information now or hereafter furnished by the Borrower to the Secured Party relating in any way to the Collateral, is and will be true and correct in all material respects as of the date furnished.

5. Default. Any material misrepresentation or misstatement in connection with, or non-compliance with or non-performance of the Notes or this Agreement, a breach of the SPA or the occurrence of an event of default under the Notes, shall constitute default under this Agreement,

provided, however, that any such non-compliance, non-performance or breach shall constitute default under this Agreement if such non-compliance, non-performance or breach, as applicable, continues for ten days after written notice to the Borrower. In addition, the Borrower shall be in default if (i) bankruptcy or insolvency proceedings are instituted by or against the Borrower, which proceedings are not dismissed within 30 days; (ii) if the Borrower makes any assignment for the benefit of creditors, or (iii) if the Borrower shall default in performance of any agreement with the Purchasers, which default is not cured within ten days after written notice to the Borrower.

6. The Secured Party's Rights and Remedies.

(a) The Secured Party may assign this Agreement, with notice to the Borrower, and, if the Secured Party does assign this Agreement, the assignee shall be entitled, upon notifying the Borrower, to performance of all of the Borrower's obligations under this Agreement.

(b) If any default hereunder by the Borrower shall have occurred and be continuing, the Secured Party may exercise its rights of enforcement under the Uniform Commercial Code in force in Nevada and any notice of lien filed with the United States Patent Office and, in conjunction with, addition to or substitution for those rights, at the Secured Party's discretion, it may:

(i) To the extent permitted by law, enter upon the Borrower's premises for a reasonable period to take possession of, assemble and collect the Collateral.

(ii) Require the Borrower to assemble the Collateral and make it available at a place the Secured Party designates which is mutually convenient, to allow the Secured Party to take possession or sell, lease, license or otherwise dispose of the Collateral.

(iii) Waive any default or remedy any default in any reasonable manner without waiving the default remedied and without waiving any other prior or subsequent default.

(iv) the Borrower understands that to the extent permitted by law, if any default hereunder by the Borrower shall have occurred and be continuing, the Secured Party has a right to take possession of the Collateral by all lawful means and to sell, lease, license or otherwise dispose of the Collateral.

(c) Except as otherwise provided herein, with regards to only non-monetary defaults, the Secured Party will give notice to the Borrower that the Borrower is in default hereunder, and the Borrower shall have ten days from the date of such notice to cure the non-monetary defaults.

(d) The Secured Party's remedies are limited to recovering its outstanding principal and accrued interest under the Notes, attorneys' fees and costs incurred in the sale of the Collateral.

7. Other Lienholders. Any person or entity taking a junior encumbrance, or other lien upon the Collateral or any part thereof or any interest therein, shall take said lien subject to the rights of the Secured Party as provided in the Notes to amend, modify, extend, renew, enlarge or release the Notes, this Agreement (as provided herein) or any other document or instrument evidencing, securing or guaranteeing the Notes, including, but not limited to, any amendments, modifications, extensions or renewals that increase the amount outstanding under the Notes, in each and every case without obtaining the consent of the holder of such junior lien and without the lien of this Agreement losing

its priority over the rights of any such junior lien. Accordingly, any person or entity taking a junior encumbrance, or other lien upon the Collateral or any part therein or any interest therein, shall take said lien subject to the provisions of the Notes and this Agreement, including, but not limited to, the above provision. Nothing in this Section shall be deemed to authorize any such junior encumbrance or other liens on the Collateral.

8. Severability. In the event any parts of this Agreement are found to be void, the remaining provisions of this Agreement shall nevertheless be binding with the same effect as though the void parts were deleted.

9. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. The execution of this Agreement may be by actual or facsimile signature, or in electronic (i.e., "pdf" or "tif") format.

10. Benefit. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their legal representatives, successors and assigns.

11. Notices and Addresses. All notices, offers, acceptance and any other acts under this Agreement (except payment) shall be in writing, and shall be sufficiently given if delivered to the addressees in person, by FedEx or similar receipted next business day delivery, or by email followed by overnight next business day delivery as follows:

Secured Party:	L 1 Capital Global Opportunities Master Fund Ltd Attention: David Feldman Email: <a href="mailto:dfeldman@l1capitalglobal.com">dfeldman@l1capitalglobal.com</a>
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with a copy to:	Nason Yeager 3101 PGA Blvd Suite 305 Palm Beach Gardens, FL 33410 Attention: Michael D. Harris, Esq. Email: <a href="mailto:mbarris@nasonyeager.com">mbarris@nasonyeager.com</a>
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the Borrower:	Sigma Labs, Inc. 3900 Paseo del Sol Santa Fe, NM 87507 Attention: Chief Executive Officer
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with a copy to:	TroyGould PC 1801 Century Park East 16th Floor Los Angeles, CA 90067 Attention: Darren Freedman, Esq
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or to such other address as any of them, by notice to the other may designate from time to time. Time shall be counted to, or from, as the case may be, the date of delivery.

12. Attorneys' Fees. In the event that there is any controversy or claim arising out of or relating to this Agreement, or to the interpretation, breach or enforcement thereof, and any action or proceeding is commenced to enforce the provisions of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and expenses (including such fees and costs on appeal).

13. Oral Evidence. This Agreement constitutes the entire Agreement between the parties and supersedes all prior oral and written agreements between the parties hereto with respect to the subject matter hereof. Neither this Agreement nor any provision hereof may be changed, waived, discharged or terminated orally, except by a statement in writing signed by the party or parties against which enforcement or the change, waiver, discharge or termination is sought.

14. Additional Documents. The parties hereto shall execute such additional instruments as may be reasonably required by their counsel in order to carry out the purpose and intent of this Agreement and to fulfill the obligations of the parties hereunder.

15. Governing Law. All claims relating to or arising out of this Agreement, or the breach thereof, whether sounding in contract, tort, or otherwise, shall also be governed by the laws of the State of Nevada without regard to choice of law considerations.


16. Section or Paragraph Headings. Section headings herein have been inserted for reference only and shall not be deemed to limit or otherwise affect, in any matter, or be deemed to interpret in whole or in part any of the terms or provisions of this Agreement.

(Signature Page Follows)



IN WITNESS WHEREOF the parties hereto have set their hand as of the date first above written.

BORROWER:  
SIGMA LABS, INC.

By:   
Mark Cola, President and Chief Executive  
Officer

L 1 CAPITAL GLOBAL OPPORTUNITIES  
MASTER FUND LTD


By: \_\_\_\_\_  
David Feldman, Managing Director

IN WITNESS WHEREOF the parties hereto have set their hand as of the date first above written.

BORROWER:  
SIGMA LABS, INC.

By: \_\_\_\_\_  
Mark Cola, President and Chief Executive  
Officer

L 1 CAPITAL GLOBAL OPPORTUNITIES  
MASTER FUND LTD

By:  \_\_\_\_\_  
David Feldman, Managing Director

**EXHIBIT A**  
**COLLATERAL**

This Security Agreement covers all of the following property of Sigma Labs, Inc. ("the Borrower"), whether now or hereafter owned, existing, acquired or arising and wherever now or hereafter located (capitalized terms used herein shall have the meaning ascribed to such term under the Uniform Commercial Code as in effect in the State of Nevada and/or as otherwise set forth herein):

- (a) Any right or interest of the Borrower in or to tangible property of any kind whatsoever, including, but not limited to, cash and fixed assets (the "Physical Collateral").
- (b) Accounts receivable.
- (c) Each United States Patent listed on Schedule A-1 hereto (the "Patent Collateral").
- (d) All warranties, increases, parts, renewals, additions and accessions to, substitutions for, and replacements, products and Proceeds of the foregoing property, and all of the Borrower's books and records relating to any of the foregoing.
- (e) All Proceeds received, directly or indirectly, by the Borrower from the Patent Collateral.

**Proceeds** shall mean and include all proceeds of, and all other profits, products, rents or receipts, in whatever form, arising from the collection, sale, lease, exchange, assignment, licensing or other disposition of, or other realization upon collateral, including, without limitation, all licenses, permits, authorizations and applications, all claims of the Borrower against third parties for loss of, damage to or destruction of, or for proceeds payable under, or unearned premiums with respect to, policies of insurance in respect of, any collateral, and any condemnation or requisition payments with respect to any collateral, in each case whether now existing or hereafter arising.

**Schedule A-1**

**Patent Collateral**

**See attached**

# Patents & Patents Pending

## Schedule A-1

Row Count: 10

File Number/County IP Family Number Working Attorney(s)	Client's Ref No.	Title	Inventors	App No. Filing Date	Pat No. Issue Date	P u b	Status & Remarks
098581-0956161/DE  Clargent, BWigger		METHOD AND SYSTEM FOR MONITORING ADDITIVE MANUFACTURING PROCESSES	Vivek R. Dave R. Bruce Madigan Mark J. Cola Martin S. Pillich	10 2015 011 013.6 8/21/15		DE 13 A1 2/25/16	Published  End of Opposition period for EP Patent 2598313 Request Examination 4/12/16 8/21/22  Open: Dossier Items Open: Dossier Items
098581-0957862/WO 002410PC Clargent, BWigger		OPTICAL MANUFACTURING PROCESS SENSING AND STATUS INDICATION SYSTEM	Vivek R. Dave Mark J. Cola Bruce Madigan Martin S. Pillich Alberto Castro	PCT/US2015/02 3/25/15	2539	WO 2015/14870 2 10/1/15	Published  Communication in Cases for Which no 9/14/15 Other Form is Applicable Notification of the Recording of a Change 9/14/15 Communication in Cases for Which no 10/23/15 Other Form is Applicable Published International Search Report 11/19/15 30 Month National Phase Application 9/26/16 (Ch1 or Ch2) 31 Month National Phase Application 10/26/16 (Ch1 or Ch2)  Completed Completed Completed Completed Open: Dossier Items Open: Dossier Items
098581-0954115/US 002610US Clargent, BWigger		METHOD AND SYSTEM FOR MONITORING ADDITIVE MANUFACTURING PROCESSES	Vivek R. Dave R. Bruce Madigan Mark J. Cola Martin S. Pillich	14/832,691 8/21/15		US-2016-0 184893- A1 6/30/16	Published  Missing Parts Response 11/4/15  Completed
098581-0958802/US 002710US BWigger, Clargent		FEATURE EXTRACTION METHOD AND SYSTEM FOR ADDITIVE MANUFACTURING	Vivek R. Dave David D. Clark Matias Roybal Mark J. Cola Martin S. Pillich	14/870,914 9/30/15		US-2016-0 098825- A1 4/7/16	Published  Missing Parts Response 12/16/15 Preliminary Amendment Filed 12/16/15  Completed Completed
098581-0956027/WO 002810PC BWigger, Clargent		MULTI-SENSOR QUALITY INFERENCE AND CONTROL FOR ADDITIVE MANUFACTURING PROCESSES	Vivek R. Dave David D Clark Matias Roybal Mark J. Cola Martin S. Pillich Bruce Madigan Alberto Castro	PCT/US2015/06 11/18/15	1420	WO 2016/08165 1 5/26/16	Published  Foreign/Counterpart Filing 11/18/15 Formal Drawings 1/20/16 30 Month National Phase Application 5/18/17 (Ch1 or Ch2) 31 Month National Phase Application 6/18/17 (Ch1 or Ch2)  Completed Completed Open: Dossier Items Open: Dossier Items Open: Dossier Items

PATENT

098581-0958615/US 002810US BWigger, CLargent	MULTI-SENSOR QUALITY INFERENCE AND CONTROL FOR ADDITIVE MANUFACTURING PROCESSES	Vivek R. Dave David D Clark Matias Roybal Mark J. Cola Martin S. Pillich R. Bruce Madigan Alberto Castro	14/945,247 11/18/15		US-2016-0- 185048- A1 6/30/16	Published Missing Parts Response	2/4/16	Completed
098581-0959947/WO 002910PC BWigger	MATERIAL QUALIFICATION SYSTEM AND METHODOLOGY	Vivek R. Dave Mark J. Cola	PCT/US2016/01 1/13/16	3303	WO 2016/11528 4 7/21/16	Published Foreign/Counterpart Filing Chapter 1 Reminder (non 30 month Ch) 30 Month National Phase Application (Ch1 or Ch2) 31 Month National Phase Application (Ch1 or Ch2)	1/13/16 9/13/16 7/13/17 8/13/17	Completed Open: Dossier Items Open: Dossier Items Open: Dossier Items
098581-0959648/US 002910US BWigger, CLargent	MATERIAL QUALIFICATION SYSTEM AND METHODOLOGY	Vivek R. Dave Mark J. Cola	14/995,183 1/13/16		US-2016-0199911- A1 7/14/16	Published Preliminary Amendment Due	7/13/16	Open: Dossier Items
098581-0959207/US 003100US CLargent, BWigger	SYSTEMS AND METHODS FOR ADDITIVE MANUFACTURING OPERATIONS	Vivek R. Dave Mark J. Cola R. Bruce Madigan Matias Roybal Alberto	62/235,232 9/30/15			Pending Foreign/Counterpart Filing	9/30/16	Open: Dossier Items
098581-1002525/US 003200US CLargent, BWigger	LAYER-BASED DEFECT DETECTION USING NORMALIZED OFF-AXIS SENSOR DATA	Vivek R. Dave Mark J. Cola	62/311,318 3/21/16			Pending Foreign/Counterpart Filing	3/21/17	Open: Dossier Items

and all reissues, continuations, divisions, continuations-in-part, renewals, improvements or extensions thereof.