

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT2708974

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
SORAA, INC.	01/31/2014
RECEIVING PARTY DATA	
Name:	BRIDGE BANK, NATIONAL ASSOCIATION
Street Address:	55 ALMADEN BOULEVARD
Internal Address:	SUITE 100
City:	SAN JOSE
State/Country:	CALIFORNIA
Postal Code:	95113
PROPERTY NUMBERS Total: 87	
Property Type	Number
Application Number:	13025833
Application Number:	13025849
Application Number:	13281221
Application Number:	13298617
Application Number:	13482956
Application Number:	13623788
Application Number:	12133365
Application Number:	12334418
Application Number:	12482440
Application Number:	12484095
Application Number:	12484924
Application Number:	12491176
Application Number:	12497969
Application Number:	12534848

Application Number:	12534844
Application Number:	12569841
Application Number:	12697171
Application Number:	12859153
Application Number:	12887207
Application Number:	12988772
Application Number:	12995946
Application Number:	13012674
Application Number:	13013697
Application Number:	13014622
Application Number:	13019897
Application Number:	13019521
Application Number:	13041199
Application Number:	13160307
Application Number:	13135087
Application Number:	13179346
Application Number:	13211145
Application Number:	13269193
Application Number:	13272981
Application Number:	13304182
Application Number:	13343563
Application Number:	13357578
Application Number:	13359846
Application Number:	13431834
Application Number:	13480767
Application Number:	13553691
Application Number:	13731453
Application Number:	13787582
Application Number:	13894220
Application Number:	13931359
Application Number:	13886547
Application Number:	14014112
Patent Number:	8597967
Patent Number:	D694722
Patent Number:	8097081

	8303710
Patent Number:	8247887
Patent Number:	8323405
Patent Number:	8430958
Patent Number:	8021481
Patent Number:	8148801
Patent Number:	8048225
Patent Number:	7976630
Patent Number:	8455894
Patent Number:	8354679
Patent Number:	8461071
Patent Number:	8247886
Patent Number:	8252662
Patent Number:	8299473
Patent Number:	8306081
Patent Number:	8153475
Patent Number:	8207554
Patent Number:	8314429
Patent Number:	8502465
Patent Number:	8435347
Patent Number:	8269245
Patent Number:	8525396
Patent Number:	8324835
Patent Number:	8313964
Patent Number:	8293551
Patent Number:	8465588
Patent Number:	8148180
Patent Number:	D662900
Patent Number:	D662899
Patent Number:	8444765
Patent Number:	8541951
Patent Number:	8482104
Patent Number:	8389305
Patent Number:	8329511
Patent Number:	8575728

	8524578
Patent Number:	8492185
Patent Number:	8575642

  

<b>CORRESPONDENCE DATA</b>	
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ATTORNEY DOCKET NUMBER:	305983-1117 SORAA
NAME OF SUBMITTER:	ERIN O'BRIEN
Signature:	/Erin O'Brien/
Date:	01/31/2014

  

<b>Total Attachments: 10</b> source=Soraa signed IPSA 013114#page1.tif source=Soraa signed IPSA 013114#page2.tif source=Soraa signed IPSA 013114#page3.tif source=Soraa signed IPSA 013114#page4.tif source=Soraa signed IPSA 013114#page5.tif source=Soraa signed IPSA 013114#page6.tif source=Soraa signed IPSA 013114#page7.tif source=Soraa signed IPSA 013114#page8.tif source=Soraa signed IPSA 013114#page9.tif source=Soraa signed IPSA 013114#page10.tif
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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT, dated as of January 31, 2014 (the "Agreement") between BRIDGE BANK, NATIONAL ASSOCIATION ("Lender") and Soraa, Inc., a Delaware corporation ("Grantor"), is made with reference to the Loan and Security Agreement, dated as of February 20, 2013 and as amended from time to time, including pursuant to that certain Loan and Security Modification Agreement dated as of the date hereof (collectively the "Loan Agreement"), between Lender and Grantor. Terms defined in the Loan Agreement have the same meaning when used in this Agreement.

For good and valuable consideration, receipt of which is hereby acknowledged, Grantor hereby covenants and agrees as follows:

To secure the Obligations under the Loan Agreement, and subject to the terms set forth in the Loan Agreement, Grantor grants to Lender a security interest in all right, title, and interest of Grantor in any of the following, whether now existing or hereafter acquired or created in any and all of the following property (collectively, the "Intellectual Property Collateral"):

(a) copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held (collectively, the "Copyrights"), including, without limitation, the Copyrights described in Exhibit A;

(b) trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks (collectively, the "Trademarks"), including, without limitation, the Trademarks described in Exhibit B;

(c) patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same (collectively, the "Patents"), including, without limitation, the Patents described in Exhibit C;

(d) mask work or similar rights available for the protection of semiconductor chips or other products (collectively, the "Mask Works");

(e) trade secrets, and any and all intellectual property rights in computer software and computer software products;

(f) design rights;

(g) claims for damages by way of past, present and future infringement of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(h) licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works, and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(i) amendments, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

(j) proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing;

*provided*, that notwithstanding the foregoing, the Intellectual Property Collateral shall not include any property of Borrower which is excluded from the definition of Collateral in Exhibit A of the Loan Agreement; and *provided further*, that the foregoing is subject to Section 4.4 of the Loan Agreement.

The rights and remedies of Lender with respect to the security interests granted hereunder are in addition to those set forth in the Loan Agreement, and those which are now or hereafter available to Lender as a matter of law or equity. Each right, power and remedy of Lender provided for herein or in the Loan 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 Lender of any one or more of such rights, powers or remedies does not preclude the simultaneous or later exercise by Lender of any other rights, powers or remedies.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

GRANTOR:

SORAA, INC.

By: 

Name: ERIC R. WILLIAMS

Title: CFO

Address for Notices:

Soraa, Inc.

6500 Kaiser Dr.

Fremont, CA 94555

Attn: CFO

LENDER:

BRIDGE BANK, NATIONAL ASSOCIATION

By: 

Name: Derek Almeida

Title: Vice President

Address for Notices:

Attn: Note Department

55 Almaden Boulevard, Suite 100

San Jose, California 95113

Fax: (408) 282-1681

EXHIBIT A

COPYRIGHTS

Please Check if No Copyrights Exist ☒

<u>Type of Work:</u>	<u>Title:</u>	<u>International Standard Serial Number (ISSN):</u>	<u>Registration Number:</u>	<u>Filing Date:</u>	<u>Pre - registered?</u>

## EXHIBIT B

## TRADEMARKS

Please Check if No Trademarks Exist ☐

<u>Mark / Title:</u>	<u>U.S. Serial Number:</u>	<u>U.S. Registration Number:</u>	<u>USPTO Reference Number:</u>	<u>Filing Date:</u>
SORAA	77982688	4150651	91756-824880	10/5/2009
SORAA	86058247		91756-887955	9/6/2013
SIMPLY PERFECT LIGHT	85870246	4431751		3/7/2013
SIMPLY PERFECT	8549244			12/14/2011
SORAA and Design (purple)	85594716	4385048		4/11/2012
SORAA SNAP SYSTEM	85895887			4/4/2013
SORAA GAN ON GAN	85593900	4336144		4/10/2012



## EXHIBIT C

## PATENTS

Please Check if No Patents Exist ☐

<u>Title:</u>	<u>Patent Number:</u>	<u>Application Serial Number:</u>	<u>Issued or Published?</u>	<u>Issue Date:</u>
ILLUMINATION SOURCE WITH REDUCED INNER CORE SIZE	US-2011-0198979-A1	13/025,833	Published	
ILLUMINATION SOURCE AND MANUFACTURING METHODS	US-2011-0204779-A1	13/025,849	Published	
GALLIUM AND NITROGEN CONTAINING TRILATERAL CONFIGURATION FOR OPTICAL DEVICES	US-2012-0199841-A1	13/281,221	Published	
METHOD AND SYSTEM FOR DICING SUBSTRATES CONTAINING GALLIUM AND NITROGEN MATERIAL	8,597,967	13/298,617	Issued	12/3/13
SYSTEM AND METHOD FOR LED PACKAGING	US-2012-0235201-A1	13/482,956	Published	
HEATSINK	D694,722	29/423,725	Issued	12/3/13
POLARIZED WHITE LIGHT DEVICES USING NON-POLAR OR SEMIPOLAR GALLIUM CONTAINING MATERIALS AND TRANSPARENT PHOSPHORS	US-2013-0270516-A1	13/623,788	Published	
HIGH PRESSURE APPARATUS AND METHOD FOR NITRIDE CRYSTAL GROWTH	8,097,081	12/133,364	Issued	1/17/12
HIGH PRESSURE APPARATUS AND METHOD FOR NITRIDE CRYSTAL GROWTH	8,303,710	12/478,736	Issued	11/6/12
METHOD AND SURFACE MORPHOLOGY OF NON-POLAR GALLIUM NITRIDE CONTAINING SUBSTRATES	8,247,887	12/497,289	Issued	8/21/12
PROCESS AND APPARATUS FOR GROWING A CRYSTALLINE GALLIUM-CONTAINING NITRIDE USING AN AZIDE MINERALIZER	8,323,405	12/534,849	Issued	12/4/12
APPARATUS AND METHOD FOR SEED CRYSTAL UTILIZATION IN LARGE-SCALE MANUFACTURING OF GALLIUM NITRIDE	8,430,958	12/534,843	Issued	4/30/13
PROCESS AND APPARATUS FOR LARGE-SCALE MANUFACTURING OF BULK MONOCRYSTALLINE GALLIUM-CONTAINING NITRIDE	8,021,481	12/534,857	Issued	9/20/11

<u>Title:</u>	<u>Patent Number:</u>	<u>Application Serial Number:</u>	<u>Issued or Published?</u>	<u>Issue Date:</u>
NITRIDE CRYSTAL WITH REMOVABLE SURFACE LAYER AND METHODS OF MANUFACTURE	8,148,801	12/546,458	Issued	4/3/12
LARGE-AREA BULK GALLIUM NITRIDE WAFER AND METHOD OF MANUFACTURE	8,048,225	12/556,562	Issued	11/1/11
LARGE-AREA SEED FOR AMMONOTHERMAL GROWTH OF BULK GALLIUM NITRIDE AND METHOD OF MANUFACTURE	7,976,630	12/556,558	Issued	7/12/11
PHOTONIC-CRYSTAL LIGHT EMITTING DIODE AND METHOD OF MANUFACTURE	8,455,894	12/569,844	Issued	6/4/13
MICROCAVITY LIGHT EMITTING DIODE METHOD OF MANUFACTURE	8,354,679	12/569,337	Issued	1/15/13
POLYCRYSTALLINE GROUP III METAL NITRIDE WITH GETTER AND METHOD OF MAKING	8,461,071	12/634,665	Issued	6/11/13
POLARIZATION DIRECTION OF OPTICAL DEVICES USING SELECTED SPATIAL CONFIGURATIONS	8,247,886	12/720,593	Issued	8/21/12
METHOD AND STRUCTURE FOR MANUFACTURE OF LIGHT EMITTING DIODE DEVICES USING BULK GAN	8,252,662	12/749,476	Issued	8/28/12
POLARIZED WHITE LIGHT DEVICES USING NON-POLAR OR SEMIPOLAR GALLIUM CONTAINING MATERIALS AND TRANSPARENT PHOSPHORS	8,299,473	12/754,886	Issued	10/30/12
HIGH INDIUM CONTAINING INGAN SUBSTRATES FOR LONG WAVELENGTH OPTICAL DEVICES	8,306,081	12/785,404	Issued	11/6/12
BACK-END PROCESSES FOR SUBSTRATES RE-USE	8,153,475	12/858,379	Issued	4/10/12
SYSTEM AND METHOD FOR LED PACKAGING	8,207,554	12/879,784	Issued	6/26/12
MULTI COLOR ACTIVE REGIONS FOR WHITE LIGHT EMITTING DIODE	8,314,429	12/880,803	Issued	11/20/12
POWER LIGHT EMITTING DIODE AND METHOD WITH CURRENT DENSITY OPERATION	8,502,465	12/936,238	Issued	8/6/13
HIGH PRESSURE APPARATUS WITH STACKABLE RINGS	8,435,347	12/891,668	Issued	5/7/13
OPTICAL DEVICE WITH WAVELENGTH SELECTIVE REFLECTOR	8,269,245	12/914,789	Issued	9/18/12
ILLUMINATION SOURCE WITH DIRECT DIE PLACEMENT	8,525,396	13/025,791	Issued	9/3/13
MODULAR LED LAMP AND MANUFACTURING METHODS	8,324,835	13/025,860	Issued	12/4/12

<u>Title:</u>	<u>Patent Number:</u>	<u>Application Serial Number:</u>	<u>Issued or Published?</u>	<u>Issue Date:</u>
SINGULATION METHOD AND RESULTING DEVICE OF THICK GALLIUM AND NITROGEN CONTAINING SUBSTRATES	8,313,964	13/163,498	Issued	11/20/12
GALLIUM AND NITROGEN CONTAINING TRIANGULAR OR DIAMOND-SHAPED CONFIGURATION FOR OPTICAL DEVICES	8,293,551	13/163,482	Issued	10/23/12
AMMONOTHERMAL METHOD FOR GROWTH OF BULK GALLIUM NITRIDE	8,465,588	13/175,739	Issued	6/18/13
TECHNIQUES OF FORMING OHMIC CONTACTS ON GAN LIGHT EMITTING DIODES	8,148,180	13/184,160	Issued	4/3/12
HEATSINK FOR LED	D662,900	29/399,524	Issued	7/3/12
HEATSINK	D662,899	29/399,523	Issued	7/3/12
PROCESS AND APPARATUS FOR LARGE-SCALE MANUFACTURING OF BULK MONOCRYSTALLINE GALLIUM-CONTAINING NITRIDE	8,444,765	13/226,249	Issued	5/21/13
HIGH TEMPERATURE LED SYSTEM USING AN AC POWER SOURCE	8,541,951	13/298,905	Issued	9/24/13
METHOD FOR GROWTH OF INDIUM-CONTAINING NITRIDE FILMS	8,482,104	13/346,507	Issued	7/9/13
TECHNIQUES OF FORMING OHMIC CONTACTS ON GAN LIGHT EMITTING DIODES	8,389,305	13/419,325	Issued	3/5/13
NITRIDE CRYSTAL WITH REMOVABLE SURFACE LAYER AND METHODS OF MANUFACTURE	8,329,511	13/425,304	Issued	12/11/12
METHOD AND SURFACE MORPHOLOGY OF NON-POLAR GALLIUM NITRIDE CONTAINING SUBSTRATES	8,575,728	13/548,635	Issued	11/5/13
METHOD AND SURFACE MORPHOLOGY OF NON-POLAR GALLIUM NITRIDE CONTAINING SUBSTRATES	8,524,578	13/548,770	Issued	9/3/13
LARGE AREA NONPOLAR OR SEMIPOLAR GALLIUM AND NITROGEN CONTAINING SUBSTRATE AND RESULTING DEVICES	8,492,185	13/548,931	Issued	7/23/13
OPTICAL DEVICES HAVING REFLECTION MODE WAVELENGTH MATERIAL	8,575,642	13/600,988	Issued	11/5/13
CAPSULE FOR HIGH PRESSURE PROCESSING AND METHOD OF USE FOR SUPERCRITICAL FLUIDS	US 2009-0301388 A1	12/133,365	Published	

<u>Title:</u>	<u>Patent Number:</u>	<u>Application Serial Number:</u>	<u>Issued or Published?</u>	<u>Issue Date:</u>
HIGH PRESSURE APPARATUS AND METHOD FOR NITRIDE CRYSTAL GROWTH	US 2010-0147210 A1	12/334,418	Published	
SELECTIVE AREA EPITAXY GROWTH METHOD AND STRUCTURE	US 2009-0309127 A1	12/482,440	Published	
HEATER DEVICE AND METHOD FOR HIGH PRESSURE PROCESSING OF CRYSTALLINE MATERIALS	US 2009-0320745 A1	12/484,095	Published	
SELECTIVE AREA EPITAXY GROWTH METHOD AND STRUCTURE FOR MULTI-COLORED DEVICES	US 2009-0309110 A1	12/484,924	Published	
COPACKING CONFIGURATIONS FOR NONPOLAR GAN AND/OR SEMIPOLAR GAN LEDS	US-2010-0001300-A1	12/491,176	Published	
HIGH QUALITY LARGE AREA BULK NON-POLAR OR SEMIPOLAR GALLIUM BASED SUBSTRATES AND METHODS	US-2010-0003492-A1	12/497,969	Published	
BASKET PROCESS AND APPARATUS FOR CRYSTALLINE GALLIUM-CONTAINING NITRIDE	US 2010-0031873 A1	12/534,848	Published	
PROCESS FOR LARGE-SCALE AMMONOTHERMAL MANUFACTURING OF GALLIUM NITRIDE BOULES	US 2010-0031875 A1	12/534,844	Published	
TEXTURED-SURFACE LIGHT EMITTING DIODE AND METHOD OF MANUFACTURE	US 2010-0295088 A1	12/569,841	Published	
PLANT AND METHOD FOR LARGE-SCALE AMMONOTHERMAL MANUFACTURING OF GALLIUM NITRIDE BOULES	US-2011-0100291-A1	12/697,171	Published	
RAPID GROWTH METHOD AND STRUCTURES FOR GALLIUM AND NITROGEN CONTAINING ULTRA-THIN EPITAXIAL STRUCTURES FOR DEVICES	US-2011-0056429-A1	12/859,153	Published	
REFLECTION MODE WAVELENGTH CONVERSION MATERIAL FOR OPTICAL DEVICES USING NON-POLAR OR SEMIPOLAR GALLIUM CONTAINING MATERIALS	US-2011-0186887-A1	12/887,207	Published	
METHOD FOR SYNTHESIS OF HIGH QUALITY LARGE AREA BULK GALLIUM BASED CRYSTALS	US-2011-0256693-A1	12/988,772	Published	
HIGHLY POLARIZED WHITE LIGHT SOURCE BY COMBINING BLUE LED ON SEMIPOLAR OR NONPOLAR GAN WITH YELLOW LED ON SEMIPOLAR OR NONPOLAR GAN	US-2011-0180781-A1	12/995,946	Published	

<u>Title:</u>	<u>Patent Number:</u>	<u>Application Serial Number:</u>	<u>Issued or Published?</u>	<u>Issue Date:</u>
GALLIUM-NITRIDE-ON-HANDLE SUBSTRATE MATERIALS AND DEVICES AND METHOD OF MANUFACTURE	US-2012-0187412-A1	13/012,674	Published	
HIGH PRESSURE APPARATUS AND METHOD FOR NITRIDE CRYSTAL GROWTH	US-2011-0183498-A1	13/013,697	Published	
QUANTUM DOT WAVELENGTH CONVERSION FOR OPTICAL DEVICES USING NONPOLAR OR SEMIPOLAR GALLIUM CONTAINING MATERIALS	US-2011-0182056-A1	13/014,622	Published	
WHITE LIGHT APPARATUS AND METHOD	US-2011-0186874-A1	13/019,897	Published	
REFLECTION MODE PACKAGE FOR OPTICAL DEVICES USING GALLIUM AND NITROGEN CONTAINING MATERIALS	US-2011-0215348-A1	13/019,521	Published	
SEMI-INSULATING GROUP III METAL NITRIDE AND METHOD OF MANUFACTURE	US-2011-0220912-A1	13/041,199	Published	
LARGE AREA NITRIDE CRYSTAL AND METHOD FOR MAKING IT	US-2012-0000415-A1	13/160,307	Published	
QUANTUM DOT WAVELENGTH CONVERSION FOR HERMETICALLY SEALED OPTICAL DEVICES	US-2011-0317397-A1	13/135,087	Published	
HIGH VOLTAGE DEVICE AND METHOD FOR OPTICAL DEVICES	US-2012-0007102-A1	13/179,346	Published	
SYSTEM AND METHOD FOR SELECTED PUMP LEDs WITH MULTIPLE PHOSPHORS	US-2012-0043552-A1	13/211,145	Published	
HIGH INTENSITY LIGHT SOURCE	US-2012-0187830-A1	13/269,193	Published	
METHOD OF MAKING BULK INGAN SUBSTRATES AND DEVICES THEREON	US-2012-0091465-A1	13/272,981	Published	
METHOD FOR MANUFACTURE OF BRIGHT GAN LEDS USING A SELECTIVE REMOVAL PROCESS	US-2012-0135553-A1	13/304,182	Published	
HIGH PRESSURE APPARATUS AND METHOD FOR NITRIDE CRYSTAL GROWTH	US-2012-0118223-A1	13/343,563	Published	
GALLIUM AND NITROGEN CONTAINING TRIANGULAR OR DIAMOND-SHAPED CONFIGURATION FOR OPTICAL DEVICES	US-2013-0026483-A1	13/357,578	Published	
METHOD AND RESULTING DEVICE FOR PROCESSING PHOSPHOR MATERIALS IN LIGHT EMITTING DIODE APPLICATIONS	US-2013-0022758-A1	13/359,846	Published	

<u>Title:</u>	<u>Patent Number:</u>	<u>Application Serial Number:</u>	<u>Issued or Published?</u>	<u>Issue Date:</u>
METHOD AND SYSTEM FOR EPITAXY PROCESSES ON MISCUT BULK SUBSTRATES	US-2013-0075770-A1	13/431,834	Published	
HIGH INTENSITY LIGHT SOURCE WITH INTERCHANGEABLE OPTICS	US-2013-0058099-A1	13/480,767	Published	
POLARIZATION DIRECTION OF OPTICAL DEVICES USING SELECTED SPATIAL CONFIGURATIONS	US-2012-0288974-A 1	13/553,691	Published	
LARGE AREA NITRIDE CRYSTAL AND METHOD FOR MAKING IT	US-2013-0119401-A1	13/731,453	Published	
LIGHT EMITTING DIODES WITH LOW REFRACTIVE INDEX MATERIAL LAYERS TO REDUCE LIGHT GUIDING EFFECTS	US-2013-0234108-A1	13/787,582	Published	
POLYCRYSTALLINE GROUP III METAL NITRIDE WITH GETTER AND METHOD OF MAKING	US-2013-0251615-A1	13/894,220	Published	
POWER LIGHT EMITTING DIODE AND METHOD WITH CURRENT DENSITY OPERATION	US 2012-0179389 A1	13/931,359	Published	
ACCESSORIES FOR LED LAMPS	Us 2013-0343062	13/886,547	Published	
ACCESSORIES FOR LED LAMPS	US 2013-0343062	14/014,112	Published	