503730574 03/10/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3777216

re RI Th	Corrective Assignment to correct the CONVEYANCE TYPE previously ecorded on Reel 032095 Frame 0701. Assignor(s) hereby confirms the RECORDING OF THIS CORRECTIVE ASSIGNMENT TO CORRECT THE CONVEYANCE TYPE FROM ASSIGNMENT TO SECURITY NTEREST.

CONVEYING PARTY DATA

Name	Execution Date
HEXATECH, INC.	01/15/2014

RECEIVING PARTY DATA

Name:	INTERSOUTH PARTNERS VI, L.P.
Street Address:	102 CITY HALL PLAZA, SUITE 200
City:	DURHAM
State/Country:	NORTH CAROLINA
Postal Code:	27701
Name:	H.I.G. VENTURE PARTNERS II, L.P.
Street Address:	1001 BRICKELL BAY DR.
City:	MIAMI
State/Country:	FLORIDA
Postal Code:	33131
Name:	H.I.G. VENTURES-HEXATECH, LLC
Street Address:	1001 BRICKELL BAY DR.
City:	MIAMI
State/Country:	FLORIDA
Postal Code:	33131
Name:	SEVIN ROSEN FUND IX L.P.
Street Address:	TWO GALLERIA TOWER
Internal Address:	13455 NOEL ROAD, SUITE 1670
City:	DALLAS
State/Country:	TEXAS
Postal Code:	75240
Name:	SEVIN ROSEN IX AFFILIATES FUND L.P.
Street Address:	TWO GALLERIA TOWER
Internal Address:	13455 NOEL ROAD, SUITE 1670
City:	DALLAS

PATENT REEL: 038056 FRAME: 0437

503730574

State/Country:	TEXAS
Postal Code:	75240
Name:	MCNC ENTERPRISE FUND, L.P.
Street Address:	4505 EMPEROR BLVD., SUITE 130
City:	DURHAM
State/Country:	NORTH CAROLINA
Postal Code:	27703

PROPERTY NUMBERS Total: 11

Property Type	Number
Patent Number:	8734965
Patent Number:	8414677
Patent Number:	8974726
Patent Number:	8766274
Patent Number:	7815970
Patent Number:	7632454
Patent Number:	7678195
Patent Number:	7915178
Patent Number:	8148802
Application Number:	14422888
Application Number:	12997963

CORRESPONDENCE DATA

Fax Number: (919)781-4865

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.

Phone: 9197914000

Email: ip@wyrick.com

Correspondent Name: DEVON E. WHITE

Address Line 1: 4101 LAKE BOONE TRAIL

Address Line 2: SUITE 300

Address Line 4: RALEIGH, NORTH CAROLINA 27607

ATTORNEY DOCKET NUMBER:	16041.018
NAME OF SUBMITTER:	DEVON E. WHITE
SIGNATURE:	/DEW/
DATE SIGNED:	03/10/2016
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 13

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Assignment Page 1 of 3

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

	Name	Execution Date
Œ	IEXATECH, INC.	01/15/2014

RECEIVING PARTY DATA

Name:	INTERSOUTH PARTNERS VI, L.P.
Street Address:	102 CITY HALL PLAZA, SUITE 200
City:	DURHAM
State/Country:	NORTH CAROLINA
Postal Code:	27701

	H.I.G. VENTURE PARTNERSII, L.P.	
Street Address:	1001 BRICKELL BAY DR.	
City:	MIAMI	
State/Country:	FLORIDA	
Postal Code:	33131	

Name:	H.I.G. VENTURES-HEXATECH, LLC
	1001 BRICKELL BAY DR.
City:	MIAMI
State/Country:	FLORIDA
Postal Code:	33131

Name:	SEVIN ROSEN FUND IX L.P.
Street Address:	TWO GALLERIA TOWER
Internal Address:	13455 NOEL ROAD, SUITE 1670
City:	DALLAS
State/Country:	TEXAS
Postal Code:	75240

Name:	SEVIN ROSEN IX AFFILIATES FUND L.P.
Street Address:	TWO GALLERIA TOWER
Internal Address:	13455 NOEL ROAD, SUITE 1670
City:	DALLAS
State/Country:	TEXAS

REEL: 038056 FRAME: 0440

Assignment Page 2 of 3

Name:	MCNC ENTERPRISE FUND, L.P.
Street Address:	4505 EMPEROR BLVD., SUITE 130
City:	DURHAM
State/Country:	NORTH CAROLINA
Postal Code:	27703

PROPERTY NUMBERS Total: 13

75240

Postal Code:

Property Type	Number
Patent Number:	7815970
Application Number:	12895018
Patent Number:	7632454
Application Number:	12556851
Patent Number:	7678195
Patent Number:	7915178
Patent Number:	8148802
Application Number:	13185544
Application Number:	13324261
PCT Number:	US2012052022
Application Number:	61781991
Application Number:	61758053
PCT Number:	US2009250626

CORRESPONDENCE DATA

Fax Number: (919)781-4865
Email: pconnaghan@wyrick.com

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

Correspondent Name: PAGE CONNAGHAN

Address Line 1: WYRICK ROBBINS, 4101 LAKE BOONE TRAIL

Address Line 2: SUITE 300

Address Line 4: RALEIGH, NORTH CAROLINA 27607

NAME OF SUBMITTER:	PAGE CONNAGHAN
Signature:	/Page Connaghan/
Date:	01/30/2014

Total Attachments: 10

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Assignment Page 3 of 3

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RECEIPT INFORMATION

EPASID: PAT2706250 **Receipt Date:** 01/30/2014

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REEL: 038056 FRAME: 0442

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (this "Agreement"), dated as of January 15, 2014, is hereby entered into by and among HexaTech, Inc., a Delaware corporation (the "Borrower"), the purchasers set forth on Exhibit A to that certain Note Purchase Agreement dated as of even date herewith (the "Purchase Agreement") (each, a "Lender" and sometimes collectively referred to herein as the "Lenders"), and Intersouth Partners VI, L.P., as the representative of the Lenders (the "Lender Representative").

RECITALS:

WHEREAS, the Lenders will make loans to Borrower (collectively, the "Loan"), which Loan shall be evidenced by Secured Convertible Promissory Notes (the "Notes") issued on or after the date hereof pursuant to the Purchase Agreement between the Lenders and the Borrower, but only if Borrower grants the Lenders a security interest in its copyrights, trademarks and patents and other collateral described in that certain Security Agreement between Borrower and the Lenders (the "Collateral"), executed in connection with the Loan and dated as of the date hereof (the "Security Agreement"); and

WHEREAS, Borrower has granted the Lenders a security interest in its presently existing or later acquired Collateral;

NOW, THEREFORE, for good and otherwise valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

AGREEMENT

- 1. <u>Secured Obligations</u>. This Agreement is given to secure the due and punctual payment of the principal of and interest on the Notes issued pursuant to the Purchase Agreement and the due and punctual performance of all other obligations under the Loan Documents (as defined in the Security Agreement) now existing and hereafter arising, including future advances (and additional Notes issued pursuant to the Purchase Agreement in respect thereof) made pursuant to the Purchase Agreement, together with any extensions and renewals of the foregoing obligations and reasonable attorneys' fees if collected by or through an attorney-at-law (collectively the "Secured Obligations"); provided, however, that "Secured Obligations" shall not include any obligations of Borrower to any Lender in Lender's capacity, as a holder of any of Borrower's capital stock.
- 2. <u>Security Interest</u>. As security for the due and punctual payment and performance by Borrower of the Secured Obligations, Borrower hereby grants the Lenders a security interest (which shall be subject and subordinate to the Permitted Liens, as defined in the Security Agreement) in all right, title and interest in its Intellectual Property (as defined below). As used herein, the term "Intellectual Property" shall include:
- (a) All copyrights, trademarks, and patents of Borrower, including, without limitation, the copyrights, trademarks, and patents listed on <u>Schedule A</u> attached hereto, all amendments, renewals, extensions relating thereto, and all licenses or other rights to use the foregoing and all license fees and royalties from such use. With respect to trademarks, the term

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Intellectual Property includes the entire goodwill of Grantor's business connected with the use of and symbolized by such trademarks;

- (b) Any trade secrets and any intellectual property rights in computer software and computer software products now or later existing, created, acquired or held by Borrower;
- (c) All design rights which may be available to Borrower now or later created, acquired or held by Borrower;
- (d) Any claims for damages (past, present or future) for infringement of any of the rights above, with the right, but not the obligation, to sue and collect damages for use or infringement of the intellectual property rights above; and
- (e) All proceeds and products of any of the foregoing, including any and all insurance, indemnity or warranty payments, license royalties, proceeds of infringement suits, the right to sue for past, present and future infringements rights throughout the world, and all reissues, divisions continuations, renewals, extensions and continuations-in-part with respect to any of the foregoing.
- 3. Term of Agreement. Borrower acknowledges and agrees that the number and amount of the Secured Obligations may fluctuate from time to time hereafter. Borrower expressly agrees that this Agreement and the security interest in the Intellectual Property conveyed to the Lenders hereunder shall remain valid and in full force and effect, notwithstanding any such fluctuations and future payments. This Agreement shall terminate, and each Lender shall release its security interest in the Intellectual Property and shall execute and deliver to Borrower all termination statements and similar documents which Borrower shall reasonably request to evidence such termination, only upon the earlier to occur of (a) the payment in full by or on behalf of Borrower of all of the then outstanding Notes issued pursuant to the Purchase Agreement and all other obligations of Borrower pursuant to any of the Loan Documents, or (b) the conversion of the full amounts then outstanding under the Notes into shares of the Borrower's capital stock pursuant to the terms of such Notes.
- 4. <u>Security Agreement</u>. This security interest is granted hereunder in conjunction with the security interest in the Collateral granted under the Security Agreement. The Lenders' rights and remedies in the Intellectual Property granted hereunder are in addition to those in the Purchase Agreement, the Security Agreement and other documents related thereto, and are in addition to those available at law or in equity. The Lenders' rights, powers and remedies herein are cumulative with every right, power or remedy provided in the Security Agreement. The Lenders' exercise of their rights, powers or remedies in this Agreement, the Purchase Agreement, the Security Agreement or any other documents related thereto does not preclude the simultaneous or later exercise of any or all other rights, powers or remedies.
- 5. <u>Amendment</u>. This Agreement may be amended only in a writing signed by both Borrower and the Lender Representative, and any amendment so effected shall be binding upon each of the Lenders; <u>provided</u>, <u>however</u>, that any such amendment or waiver that disproportionately affects any of the holders of the then-outstanding Notes shall require the written consent of all such disproportionately affected holders. No delay or failure on the part of

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any Lender in the exercise of any right, power or privilege under this Agreement shall impair any such right, power or privilege or be construed as a waiver of any default or any acquiescence therein. No single or partial exercise of such right, power or privilege shall preclude the further exercise of such right, power or privilege or the exercise of any other right, power or privilege. No waiver shall be valid against the Lenders unless made in writing and signed by the Lender Representative, and then only to the extent expressly specified therein. Borrower hereby waives presentment and notice of dishonor and protest of all instruments included or evidencing the liability of Borrower in respect to the Secured Obligations or the Collateral and any and all notices and demands whatsoever, whether or not relating to such instruments, except as otherwise provided in such instruments. Notwithstanding the foregoing, Borrower may amend Schedule A from time-to-time as necessary to add any after-acquired Intellectual Property, by filing a Confirmatory Intellectual Property Security Agreement ("Confirmatory Security Agreement"), in a form substantially similar to Exhibit A to this Agreement, in the United States Patent and Trademark Office or the United States Copyright Office, as applicable. A copy of any such Confirmatory Security Agreement filed by Borrower shall be provided to Lender Representative.

[Signature pages follow.]

This Intellectual Property Security Agreement is hereby executed as of the year and date first above written.

BORROWER:	HEXATECH, INC.
	By:
LENDER REPRESENTATIVE:	INTERSOUTH PARTNERS VI, L.P.
	By: Intersouth Associates VI, L.P., Its General Partner
	Ву:
	Name: Title:
LENDERS:	INTERSOUTH PARTNERS VI, L.P.
	By: Intersouth Associates VI, L.P., Its General Partner
	Ву:
	Name:
	Title:
	H.I.G. VENTURE PARTNERS II, L.P.
	Ву:
	Name:
	Title:
	H.I.G. VENTURES – HEXATECH, LLC
	Ву:
	Name:
	Title:

BORROWER:	HEXATECH, INC.	
	By: Name: Title:	
LENDER REPRESENTATIVE:	INTERSOUTH PARTNERS VI, L.P.	
	By: Intersouth Associates VI, L.P., Its General Partner	
	By: Uutllu Name: Mitch Mumma	
	Title: Member Manager	
LENDERS:	INTERSOUTH PARTNERS VI, L.P.	
	By: Intersouth Associates VI, L.P., Its General Partner	
	By: (liotal) lun	
	Name: Mitch Mummin	
	Title: Member Manager	
	H.I.G. VENTURE PARTNERS II, L.P.	
	Ву:	
	Name;	

[Signature Page to Intellectual Property Security Agreement]

By:

H.I.G. VENTURES - HEXATECH, LLC

Title:

Name:

This Intellectual Property Security Agreement is hereby executed as of the year and date first above written.

BORROWER:	HEXATECH, INC.
	Ву:
	Name:
	Title:
LENDER REPRESENTATIVE;	INTERSOUTH PARTNERS VI, L.P.
	By: Intersouth Associates VI, L.P., Its General Partner
	Ву;
	Name:
	Title:
LENDERS:	INTERSOUTH PARTNERS VI, L.P.
	By: Intersouth Associates VI, L.P., Its General Partner
	Ву:
	Name:
	Title:
	H.I.G. VENTURE PARTNERS-H. L.P.
	By:
	Name: Richard Siegel
	Title: Authorized Signatory
	H.I.G. VENTURES - HEXATECH, LLC
	By:
	Name: Richard Siegel
	Title: Authorized Signatory

[Signature Page to Intellectual Property Security Agreement]

Ву:	John W Cambier
Name	CFO & Treasurer, NC IDEA Sole Member and Manager, MCNC Ventures
SEVI	IN ROSENCEUNIOUX L.P.
Ву:	SRB ASSOCIATES IX L.P., Its General Partner
Ву	SRB ASSOCIATES IX L.L.C. Its General Partner
By:	
•	Member
	John V. Jaggers
	Print Name
SEV	IN ROSEN IX AFFILIATES FUND L.P.
Ву:	SRB ASSOCIATES IX L.P., Its General Partner
Ву:	SRB ASSOCIATES IX L.L.C. Its General Partner
Ву:	
107.	Member
	John V. Jaggers
	Print Name

MCNC ENTERPRISE FUND, L.P.

[Signature Page to Intellectual Property Security Agreement]

MCNC ENTERPRISE FUND, L.P.

Ву:	
Name:	

SEVIN ROSEN FUND IX L.P.

SRB ASSOCIATES IX L.P., By:

Its General Partner

SRB ASSOCIATES IX L.L.C. By:

Its General Partner

By:

Member

John V. Jaggers

Print Name

SEVIN ROSEN IX AFFILIATES FUND L.P.

SRB ASSOCIATES IX L.P., Its General Partner By:

SRB ASSOCIATES IX L.L.C. By:

Its General Partner

By:

Member

John V. Jakeci Print Name

SCHEDULE A

INTELLECTUAL PROPERTY

1. Copyrights/Software:

Software Program / Description	Registration/ Application Number	Registration/ Application Date
NONE		

2. Patents and patent applications

Title / Description	Inventor Names(s)	Registration/ Application Number	Registration/ Application Date
Controlled Polarity Group III-Nitride Films and Methods of Preparing Such Films	Raoul Schlesser Vladimir Noveski Ramon R. Collazo	US 11/382,806 Patent No.	Filed 5/11/2006 Issued
Treparing oden Timis		7,815,970 US 12/895,018	10/6/2010 Filed 9/30/2010
		EP 05852374.7	Filed 11/29/2005
		JP 2008-511103	Filed 11/29/2005
Dense Shaped Articles Constructed of a Refractory Material and Methods of Preparing	Raoul Schlesser Rafael F. Dalmau Vladimir Noveski Zlatko Sitar	US 11/398,270 Patent No. 7,632,454	Filed 4/5/2006 Issued 12/15/2009
Such ArticlesRaoul Schlesser		US 12/556,851	Filed 9/10/2009
		EP 06758277.5	Granted 4/5/2006
		JP 2008-505509	Filed 4/5/2006
		EP 11167505.4	Granted 11/21/2012
Seeded Growth Process for Preparing Aluminum Nitride Single Crystals	Raoul Schlesser Vladimir Noveski Zlatko Sitar	US 11/399,713 Patent No. 7,678,195	Filed 4/6/2006 Issued 3/16/2010
		EP 06749479.9	Declaration to grant 02/27/2013
		JP 2008-505555	Filed 4/6/2006

Surface Preparation and Passivation of AIN Wafers for Epitaxial Thin Film Growth	Ramon Collazo Zlatko Sitar Rafael Dalmau	US 12/182,475 Patent No. 7,915,178	Filed 7/30/2008 Issued 3/29/2011
		US 13/028,505 Patent No. 8,148,802	Filed 2/16/2011 Issued 4/3/2012
		EP 09790902.2	Filed 7/29/2009 Filed 7/29/2009
		JP 2011-52	1263

Liquid Sanitation Device	Raoul Schlesser James M. LeMunyon	US 2009/0250626	Filed 4/3/2009 Pub. Oct. 8, 2009
Polycrystalline AIN Material and Method of Production Thereof	Baxter Moody Rafael Dalmau David Henshall Raoul Schlesser	US 13/185,544	Filed 7/19/2011
Thermal Expansion Engineering for Polycrystalline AIN Sintered Bodies	Spalding Craft Baxter Moody Rafael Dalmau Raoul Schlesser	US 13/324,261	Filed 12/13/2011
Highly Transparent Aluminum Nitride Single Crystalline Layers and Devices Made Therefrom	Joint Patent between: - HexaTech, Inc North Carolina State University - Tokuyama Corp. (Japan) - Tokyo University of Agriculture and Technology (TUAT)	PCT/US2012/05 2022	Filed 8/23/2012
Optoelectric Devices Incorporating Single Crystalline Aluminum Nitride Substrate	Jinqiao Xie Baxter Moody Seiji Mita	61/758,053	Provisional filed 01/29/2013
Power Semiconductor Incorporating Single Crystalline Aluminum Nitride Substrates	Baxter Moody Seiji Mita Jinqiao Xie	61/781,991	Provisional filed 03/14/2013

3. Trademarks and trademark applications

Title / Description	Registration/ Application Number	Registration/ Application Date
NONE	·	

PATENT REEL: 038056 FRAME: 0452

RECORDED: 03/10/2016