

**TRADEMARK ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST

**CONVEYING PARTY DATA**

Name	Formerly	Execution Date	Entity Type
Verenium Corporation		10/19/2011	CORPORATION: DELAWARE

**RECEIVING PARTY DATA**

<b>Name:</b>	Comerica Bank
<b>Street Address:</b>	39200 Six Mile Road
<b>Internal Address:</b>	MC7578
<b>City:</b>	Livonia
<b>State/Country:</b>	MICHIGAN
<b>Postal Code:</b>	48152
<b>Entity Type:</b>	a Texas banking association: TEXAS

**PROPERTY NUMBERS Total: 13**

Property Type	Number	Word Mark
Registration Number:	2396696	DIVERSA
Registration Number:	2474025	PYROLASE
Registration Number:	3142892	LUMINASE
Registration Number:	2993233	COTTONASE
Registration Number:	3490178	ACCENTUASE
Registration Number:	3308380	PURIFINE
Registration Number:	3373534	FUELZYME
Registration Number:	3562414	THE NATURE OF ENERGY
Registration Number:	3815450	VERETASE
Registration Number:	3773475	VERENIUM
Registration Number:	3935089	XYLATHIN
Registration Number:	3706903	VERENIUM
Serial Number:	85086994	THE ENERGY OF NATURE

**CH \$340.00 2396696**

**CORRESPONDENCE DATA**

Fax Number: (313)496-8454  
Phone: 3134967562  
Email: spano@millercanfield.com

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.*

Correspondent Name: Kristen I. Spano  
Address Line 1: 150 West Jefferson Avenue  
Address Line 2: Suite 2500  
Address Line 4: Detroit, MICHIGAN 48226

ATTORNEY DOCKET NUMBER:	125055-986
NAME OF SUBMITTER:	Kristen I. Spano
Signature:	/Kristen I. Spano/
Date:	10/21/2011

**Total Attachments: 16**

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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (the "Agreement") is made as of October 19, 2011, by and between **VERENIUM CORPORATION**, a Delaware corporation ("Grantor"), and **COMERICA BANK**, a Texas banking association ("Secured Party").

### RECITALS

A. Secured Party has agreed to lend to Grantor certain funds (the "Loan"), and Grantor desires to borrow such funds from Secured Party pursuant to the terms of that certain Loan and Security Agreement, dated as of October 19, 2011, (the "Loan Agreement"), the Loan Documents and the Ex-Im Facility Documents. All initially capitalized terms used herein without definition shall have the meanings ascribed to them in the Loan Agreement.

B. In order to induce Secured Party to enter into the Loan Agreement, the Loan Documents and the Ex-Im Facility Documents, Grantor has agreed to grant a security interest in certain intangible property to Secured Party for purposes of securing the obligations of Grantor to Secured Party.

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

1. Grant of Security Interest. As collateral security for the prompt repayment of any and all Obligations and to secure prompt performance by Grantor of each of its covenants and duties to Secured Party under the Loan Documents (other than the Warrant) and the Ex-Im Facility Documents, Grantor hereby grants a security interest and mortgage to Secured Party, as security, in and to Grantor's entire right, title and interest in, to and under the following (all of which shall collectively be called the "Intellectual Property Collateral"), it being understood that security interests in the Intellectual Property Collateral shall not be perfected in any jurisdiction outside of the United States:

(a) Any and all 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, including without limitation those set forth on Exhibit A attached hereto (collectively, the "Copyrights");

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights which may be available to Grantor now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (other than the BP Patents) (collectively, the "Patents");

(e) Any 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 Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

(f) Any and all 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;

(g) All licenses (other than the Japanese License), including, but not limited to the BP License and all other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights; and

(h) All amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents; and

(i) All 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.

The Secured Party's security interest in the Intellectual Property Collateral shall remain in effect until Payment-in-Full.

2. Authorization and Request. Grantor authorizes and requests that the Register of Copyrights and the Commissioner of Patents and Trademarks record this security agreement.

3. Covenants and Warranties. All covenants, representations and warranties contained in the Loan Agreement are hereby incorporated by referenced. Grantor further represents, warrants, covenants and agrees as follows:

(a) Performance of this Agreement does not conflict with or result in a breach of any agreement to which Grantor is party or by which Grantor is bound, except to the extent that certain intellectual property agreements prohibit the assignment of the rights thereunder to a third party without the licensor's or other party's consent and this Agreement constitutes an assignment, or except to the extent such default could not reasonably be expected to cause a Material Adverse Effect;

(b) Grantor shall register or cause to be registered (to the extent not already registered) with the United States Patent and Trademark Office or the United States Copyright Office, as applicable, those registerable intellectual property rights listed on Exhibits A, B and C hereto within thirty (30) days of the date of this Agreement;

(c) This Agreement creates in favor of Secured Party, and in the case of after acquired Intellectual Property Collateral, at the time Grantor first has rights in such after acquired Intellectual Property Collateral this Agreement will create in favor of Secured Party, a valid and perfected first priority security interest in the Intellectual Property Collateral in the United States securing the payment and performance of the obligations evidenced by the Loan Agreement upon making the filings referred to in clause (i) below, subject to any Permitted Liens;

(d) Except for, and upon, the filing with the United States Patent and Trademark office with respect to the Patents and Trademarks and the Register of Copyrights with respect to the Copyrights such documents as are necessary to perfect the security interests created hereunder, and except as has been already made or obtained, no authorization, approval or other action by, and no notice to or filing with, any U.S. governmental authority or U.S. regulatory body is required either (i) for the grant by Grantor of the security interest granted hereby or for the execution, delivery or performance of this Agreement by Grantor in the U.S. or (ii) for the perfection in the United States or the exercise by Secured Party of its rights and remedies hereunder;

(e) No representation, warranty or other statement made by Grantor or other information provided in any certificate or written statement furnished, whether now or later, to Secured Party with respect to the Intellectual Property Collateral taken together with all such certificates and written statements furnished to

Secured Party contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading;

(f) Grantor shall not enter into any agreement that would materially impair or conflict with Grantor's obligations hereunder without Secured Party's prior written consent, which consent shall not be unreasonably withheld. Grantor shall not permit the inclusion in any material contract to which it becomes a party of any provisions that could or might in any way prevent the creation of a security interest in Grantor's rights and interests in any property included within the definition of the Intellectual Property Collateral acquired under such contracts, except that certain contracts may contain anti-assignment provisions that could in effect prohibit the creation of a security interest in such contracts if Grantor is required, in its commercially reasonable judgment, to accept such provisions; and

(g) Upon any executive officer of Grantor obtaining actual knowledge thereof, Grantor will promptly notify Secured Party in writing of any event that materially adversely affects the value of any Intellectual Property Collateral, the ability of Grantor to dispose of any Intellectual Property Collateral or the rights and remedies of Secured Party in relation thereto, including the levy of any legal process against any of the Intellectual Property Collateral.

4. Secured Party's Rights. Secured Party shall have the right, but not the obligation, to take, at Grantor's sole expense, any actions that Grantor is required under this Agreement to take but which Grantor fails to take, after fifteen (15) days' notice to Grantor. Grantor shall reimburse and indemnify Secured Party for all reasonable costs and reasonable expenses incurred in the reasonable exercise of its rights under this Section 4, provided that Grantor's liability for expenses incurred in connection with any audits (including any under Section 6.9 of the Loan Agreement) shall be limited to the extent provided for in Section 6.2 of the Loan Agreement.

5. Inspection Rights. Grantor hereby grants to Secured Party and its employees, representatives and agents the right to visit, during reasonable hours upon prior reasonable written notice to Grantor, any of Grantor's plants and facilities that manufacture, install or store products (or that have done so during the prior six month period) that are sold utilizing any of the Intellectual Property Collateral, and to inspect the products and quality control records relating thereto upon reasonable written notice to Grantor and as often as may be reasonably requested, in each case, subject to the limitations on inspections set forth in the Loan Agreement.

6. Further Assurances; Attorney-in-Fact.

(a) On a continuing basis, Grantor will make, execute, acknowledge and deliver, and file and record in the proper filing and recording places in the United States, all such instruments, including appropriate financing and continuation statements and collateral agreements and filings with the United States Patent and Trademark Office and the Register of Copyrights, and take all such action as may reasonably be deemed necessary or advisable, or as reasonably requested by Secured Party, to perfect Secured Party's security interest in all Copyrights, Patents and Trademarks and otherwise to carry out the intent and purposes of this Agreement, or for assuring and confirming to Secured Party the grant or perfection of a security interest in all Intellectual Property Collateral.

(b) Grantor hereby irrevocably appoints Secured Party as Grantor's attorney-in-fact, with full authority in the place and stead of Grantor and in the name of Grantor, from time to time in Secured Party's discretion, to take any action and to execute any instrument which Secured Party may deem necessary or advisable to accomplish the purposes of this Agreement, including (i) to modify, in its sole discretion, this Agreement without first obtaining Grantor's approval of or signature to such modification by amending Exhibit A, Exhibit B and Exhibit C, thereof, as appropriate, to include reference to any right, title or interest in any Copyrights, Patents or Trademarks acquired by Grantor after the execution hereof or to delete any reference to

any right, title or interest in any Copyrights, Patents or Trademarks in which Grantor no longer has or claims any right, title or interest, (ii) to file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Intellectual Property Collateral without the signature of Grantor where permitted by law, and (iii) after the occurrence of an Event of Default under this Agreement, to transfer the Intellectual Property Collateral into the name of Secured Party or a third party to the extent permitted under the California Uniform Commercial Code.

7. Events of Default. The occurrence of any default or Event of Default under the Loan Agreement, the Loan Documents or the Ex-Im Facility Documents shall constitute an Event of Default under this Agreement.

8. Remedies. Upon the occurrence and continuance of an Event of Default under this Agreement, Secured Party shall have the right to exercise all the remedies of a secured party under the California Uniform Commercial Code or as otherwise provided for in the Loan Documents, including without limitation the right to require Grantor to assemble the Intellectual Property Collateral and to make it available to Secured Party as Secured Party may designate. Secured Party shall have a nonexclusive, royalty free license to use the Copyrights, Patents and Trademarks to the extent reasonably necessary to permit Secured Party to exercise its rights and remedies upon the occurrence of an Event of Default under this Agreement. Grantor will pay any expenses (including reasonable attorneys' fees) incurred by Secured Party in connection with the exercise of any of Secured Party's rights hereunder, including without limitation any expense incurred in disposing of the Intellectual Property Collateral. All of Secured Party's rights and remedies with respect to the Intellectual Property Collateral shall be cumulative.

9. Indemnity. Grantor agrees to defend, indemnify and hold harmless Secured Party and its officers, employees, and agents against: (a) all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with the transactions contemplated by this Agreement; and (b) all losses or expenses in any way suffered, incurred, or paid by Secured Party as a result of or in any way arising out of, following or consequential to transactions between Secured Party and Grantor, whether under this Agreement or otherwise (including without limitation reasonable attorneys' fees and reasonable expenses), except for obligations, demands, claims, liabilities, losses or expenses arising from or out of Secured Party's or its officers', employees', or agents' gross negligence or willful misconduct.

10. Course of Dealing. No course of dealing, nor any failure to exercise, nor any delay in exercising any right, power or privilege hereunder shall operate as a waiver thereof.

11. Attorneys' Fees. If any action relating to this Agreement is brought by either party hereto against the other party, the prevailing party shall be entitled to recover reasonable attorneys' fees, costs and disbursements.

12. Amendments. This Agreement may be amended only by a written instrument signed by both parties hereto.

13. Counterparts. 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.

14. California Law and Jurisdiction; Jury Waiver. This Agreement shall be governed by the laws of the State of California, without regard for choice of law provisions. Grantor and Secured Party consent to the exclusive jurisdiction of any state or federal court located in Santa Clara County, California. GRANTOR AND SECURED PARTY EACH WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THE LOAN DOCUMENTS, THIS AGREEMENT, OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREIN, INCLUDING

CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS.

*[end of Agreement; signatures on next page]*

IN WITNESS WHEREOF, the parties hereto have executed this Intellectual Property Security Agreement on the day and year first above written.

GRANTOR:

Address of Grantor:

4955 Directors Place  
San Diego, CA 92121

Attn:

**VERENIUM CORPORATION,**  
a Delaware corporation

By: 

Name: Jeff Black

Its: Chief Financial Officer

SECURED PARTY:

Address of Secured Party:

39200 Six Mile Road, MC 7578  
Livonia, MI 48152

**COMERICA BANK**

By: 

Name: Lake T. McGuire

Its: Vice President



EXHIBIT A

Copyrights

None.

EXHIBIT B

Patents

<u>Patent/Serial No.</u>	<u>Title</u>
10547956	Hydrolases, Nucleic Acids Encoding Them And Methods For Making And Using Them
11575066	Compositions and Methods for Making and Modifying Oils
11817865	Hydrolases, Nucleic Acids Encoding Them and Methods for Improving Paper Strength
11817997	Lyase Enzymes, Nucleic Acids Encoding Them and Methods for Making and Using Them
11868909	Nitrilases and Methods for Making and Using Them
12032337	Chemoenzymatic Methods for the Synthesis of Statins and Statin Intermediates
12202119	Hydrolases, Nucleic Acids Encoding Them and Methods for Making and Using Them
12278108	Esterases and Related Nucleic Acids and Methods
12281052	Aldolases, Nucleic Acids Encoding Them and Methods for Making and Using Them
12303088	Lyase Enzymes, Nucleic Acids Encoding Them and Methods for Making and Using Them
12439459	Laccases for Bio-Bleaching
12442207	Phytases, Nucleic Acids Encoding Them and Methods for Making and Using Them

12442255 Phospholipases, Nucleic Acids  
Encoding Them and Methods for  
Making and Using Them

12499698 Pectate Lyases, Nucleic Acids  
Encoding Them and Methods for  
Making and Using Them

12520523 Amylases and Glucoamylases, Nucleic  
Acids Encoding Them and Methods for  
Making and Using Them

12529340 Nitrilases, Nucleic Acids Encoding  
Them and Methods for Making and  
Using Them

12567550 Enzymes Having Alpha Amylase  
Activity and Methods of Making and  
Using Them

12683906 Dehalogenases, Nucleic Acids  
Encoding Them and Methods for  
Making and Using Them

12697907 Amylases, And Methods for used in  
Starch Processing

12742643 Compositions and Methods for Making  
Androstenediones

12756079 Amylases, Nucleic Acids Encoding  
Them and Methods for Making and  
Using Them

12763198 Methods for Making Simvastatin and  
Intermediates

12764844 Laccases, Nucleic Acids Encoding  
Them and Methods for Making and  
Using Them

12773317 Nitrilases, Nucleic Acids Encoding  
Them and Methods for Making and  
Using Them

12810057 Transferases and Oxidoreductases,  
Nucleic Acids Encoding them and  
methods for making and using them

12810067 Isomerases, Nucleic Acids Encoding  
them and methods for making and using  
them

12822413	Amylases, Nucleic Acids Encoding them and methods for making and using them
12830157	Polymerase
5356801	Recombinant DNA Encoding a Desulfurization Biocatalyst
5496729	Process for the Desulfurization and the Desalting of a Fossil Fuel
5510265	Multistage Process for Deep Desulfurization of a Fossil Fuel
5772901	Oil/Water/Biocatalyst Three Phase Separation Process
5814473	Transaminases and Aminotransferases
5846813	DSZD Utilization in Desulfurization of DBT by Rhodococcus SP. IGTS8
5876997	Novel Phytase
5877001	Amidase
5879914	Recombinant DNA Encoding a Desulfurization Biocatalyst
5925749	Carboxymethyl Cellulase from Thermotoga Maritima
5939300	Catalases
5948666	Isolation and Identification of Polymerases
5952208	N DSZ Gene Expression in Pseudomonas
5962258	Carboxymethyl Cellulase from Thermotoga Maritima
5962283	Transaminases and Aminotransferases
5985646	Amidase
6004796	Amidase

6008032	Carboxymethyl Cellulase from Thermotoga Maritima
6013509	Transaminases and Aminotransferases
6071738	CONVERSION OF ORGANOSULFUR COMPOUNDS TO OXYORGANOSULFUR COMPOUNDS FOR DESULFURIZATION OF FOSSIL FUELS
6074860	Catalases
6110719	Novel Phytase
6133016	Sphingomonas Biodesulfurization Catalyst
6136583	Amidase
6183740	Recombinant Bacterial Phytases and Uses Thereof
6190897	Novel Phytase
6245547	Carboxymethyl Cellulase from Thermotoga Maritima
6303562	Compositions comprising 2-(2- hydroxyphenyl)benzenesulfinate and alkyl-substituted derivatives thereof
6410290	Catalases
6465204	Amidase
6492511	Isolation and Identification of Novel Polymerases
6500659	Amidase
6632937	Nucleic Acids and Proteins From Cenarchaeum Symbiosum
6673552	METHODS FOR PURIFYING ANNEALED DOUBLE-STRANDED OLIGONUCLEOTIDES LACKING BASE PAIR MISMATCHES OR NUCLEOTIDE GAPS
6720014	Recombinant Bacterial Phytases and

Uses Thereof

- 6855365 Recombinant Bacterial Phytases and Uses Thereof
- 6943001 Epoxide Hydrolases, Nucleic Acids Encoding Them and Methods for Making and Using Them
- 6979733 Epoxide Hydrolases, Nucleic Acids Encoding Them and Methods of Making and Using Them
- 7049101 Enzymes Having High Temperature Polymerase Activity and Methods of Use Thereof
- 7056703 Polypeptides having Polymerase Activity and Methods of Use Thereof
- 7078035 Phytases, Nucleic Acids Encoding Them and Methods for Making and Using them
- 7078504 Enzymes Having Dehgalogenase Activity and Methods of Use Thereof
- 7226771 Phospholipases, Nucleic Acids Encoding Them and Methods for Making and Using them
- 7232672 P450 Enzymes, Nucleic Acids Encoding Them and Methods for Making and Using them
- 7232677 Phytase Expression Systems and Methods of Making and Using Them
- 7273740 Enzymes Having Alpha Amylase Activity and Methods of Use Thereof
- 7288400 Nucleic Acids Encoding Esterases and Methods of Making and Using Them
- 7300775 Methods for Producing Alpha-Substituted Carboxylic Acids Using Nitrilases and Strecker Reagents
- 7323336 Enzymes Having Alpha Amylase Activity and Methods of Use Thereof
- 7407677 Enzymes Having Alpha Amylase

Activity and Methods of Use Thereof

7414119 Aldolases, Nucleic Acids Encoding Them and Methods for Making and Using them

7416874 Recombinant Bacterial Phytases and Uses Thereof

7422876 Methods for Generating Cellulases

7432097 Phytases, Nucleic Acids Encoding Them and Methods of Making and Using Them

7432098 Phytases and Methods for Making and Using Them

7452706 Recombinant Bacterial Phytases and Uses Thereof

7521216 Nitrilases and Methods for Making and Using Them

7560126 Amylases, Nucleic Acids Encoding Them and Methods for Making and Using Them

7592434 Pectate Lyases, Nucleic Encoding Them and Methods for Making and Using Them

7608445 Nitrilases, Nucleic Acids Encoding Them and Methods for Making and Using Them

7642079 Proteases, Nucleic Acids Encoding Them and Methods for Making and Using Them

7651849 Nitrilases

7659102 Amylases, Nucleic Acids Encoding Them and Methods for Making and Using Them

7666633 Enzymes Having Alpha Amylase Activity and Methods of Making and Using Them

7671189 Enzymes Having Dehalogenase

Activity and Methods of Use Thereof

- 7700329 Methods for Making Simvastatin and Intermediates
- 7741089 Laccases, Nucleic Acids Encoding Them and Methods for Making and Using Them
- 7741092 Amylases, Nucleic Acids Encoding Them and Methods for Making and Using Them
- 7759093 Amylases, Nucleic Acids Encoding Them and Methods for Making and Using Them
- 7781198 Polymerase – Encoding Nucleic Acids and Methods of Making and Using Them
- 7811804 Nitrilases, Nucleic Acids Encoding Them and Methods for Making and Using Them
- 7824895 Phytases, Nucleic Acids Encoding Them and Methods for Making and Using Them
- 7863031 Phytases and Methods of Making and Using Them
- 7932064 Processes for Making @-Ethyl 4-Cyano-3-Hydroxybutyric Acid
- 7943360 Phospholipases, Nucleic Acids Encoding Them and Methods for Making and Using Them
- 7977080 Phospholipases, Nucleic Acids Encoding Them and Methods for Making and Using Them
- 7981844 Methods for the Manufacture of Pure Single Enantiomer Compounds and for Selecting Enantioselective Enzymes
- 7993901 Nitrilases and Methods for Making and Using Them
- 13058584 Hydrolases, Nucleic Acids Encoding



Them and Methods For Making and  
Using Them

EXHIBIT C

Trademarks

<u>Trademark</u>	<u>Serial/Reg. No.</u>
DIVERSA	2396696
PYROLASE	2474025
LUMINASE	3142892
COTTONASE	2993233
ACCENTUASE	3490178
PURIFINE	3308380
FUELZYME	3373534
THE NATURE OF ENERGY	3562414
VERETASE	3815450
VERENIUM	3773475
XYLATHIN	3935089
VERENIUM AND DESIGN	3706903
THE ENERGY OF NATURE	85086994