PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT	
NATURE OF CONVEYANCE:	Corrective Assignment to correct the Execution date for Analia Bueno from 08/04/2007 to 08/04/2009 previously recorded on Reel 023066 Frame 0737. Assignor(s) hereby confirms the Assignment of assignor's interest to Verenium Corporation.	

CONVEYING PARTY DATA

Name	Execution Date
David Weiner	08/04/2009
Peter Luginbuhl	08/04/2009
Analia Bueno	08/04/2009
Joslin Cuenca	08/04/2009

RECEIVING PARTY DATA

Name:	Verenium Corporation
Street Address:	4955 Directors Place
City:	San Diego
State/Country:	CALIFORNIA
Postal Code:	92121-1609

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US0888675

CORRESPONDENCE DATA

500933532

(858)526-5796 Fax Number:

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

858-526-5296 Phone:

Email: rick.delatorre@verenium.com

Correspondent Name: Verenium Corporation Address Line 1: P.O.Box 910550

Address Line 2: Intellectual Property Department San Diego, CALIFORNIA 92191-0550 Address Line 4:

ATTORNEY DOCKET NUMBER: D1240-13WO (CORRECTED)

PATENT

REEL: 023076 FRAME: 0515

NAME OF SUBMITTER:	Rick de la Torre
Total Attachments: 9 source=2009-08-07 - AssignmentCover She	eet (D1240-13WO)#page2.tif eet (D1240-13WO)#page3.tif eet (D1240-13WO)#page4.tif eet (D1240-13WO)#page5.tif eet (D1240-13WO)#page6.tif eet (D1240-13WO)#page7.tif eet (D1240-13WO)#page8.tif

PATENT REEL: 023076 FRAME: 0516 USPTO 8/7/2009 11:48:53 AM PAGE 4/005 Fax Server

TO: VERENIUM CORPORATION COMPANY: P.O. BOX 910550

PATENT ASSIGNMENT Electronic Version v1.1 08/07/2009 500931271 Stylesheet Version v1.1 SUBMISSION TYPE: **NEW ASSIGNMENT** NATURE OF CONVEYANCE: ASSIGNMENT **CONVEYING PARTY DATA Execution Date** Name 08/04/2009 David Weiner Peter Luginbuhl 08/04/2009 08/04/2007 Anaša Bueno 08/04/2009 Jostin Cuenca RECEIVING PARTY DATA Name: Verenium Corporation Street Address: 4955 Directors Piace City: San Diego State/Country: CALIFORNIA Postal Code: 92121-1809

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US0888675

CORRESPONDENCE DATA

Fax Number: (858)528-5796

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

Phone: 858-526-5296

Email: ríck.delatorre@verenium.com

Correspondent Name: Verenium Corporation

Address Line 1: P.O.Box 910550

Address Line 2: Intellectual Property Department
Address Line 4: San Diego, CALIFORNIA 92191-0550

ATTORNEY DOCKET NUMBER: D1240-13WO - INVS-VRNM

NAME OF SUBMITTER: Rick de la Torre

PATENT REEL: 023076 FRAME: 0517 USPTO 8/7/2009 11:48:53 AM PAGE 5/005 Fax Server

TO: VERENIUM CORPORATION COMPANY: P.O. BOX 910550

Total Attachments: 7
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PATENT REEL: 023076 FRAME: 0518 This Assignment effective the 31st day of December, 2008.

ASSIGNMENT

This Assignment by:

David WEINER, of 13416 Portofino Drive, Del Mar, California 92014, United States of America;

Peter LUGINBUHL, of 12802 Calle de la Siena, San Diego, California, 92130, United States of America;

Analia BUENO, of 4498 Ocean View Boulevard, San Diego, California, 92113, United States of America:

and

Joslin CUENCA, of 8847 Spectrum Center Boulevard #6116, San Diego, California, 92123, United States of America;

(hereinafter referred to as the "Assignors"), witnesseth:

WHEREAS, said Assignors have invented certain new and useful inventions and/or improvements (hereinafter referred to as the "Inventions") set forth in and the subject of

an International Patent Application under the Patent Cooperation Treaty (PCT), which includes a designation of the United States of America, naming the Assignors listed above as inventors, entitled

TRANSFERASES AND OXIDOREDUCTASES, NUCLEIC ACIDS ENCODING THEM AND METHODS FOR MAKING AND USING THEM

filed in a competent PCT receiving office as International Application Number PCT/US2008/088675 on December 31, 2008,

identified by attorney docket number D1240-13WO;

WHEREAS.

VERENIUM CORPORATION (previously named Diversa Corporation), a corporation duly organized under and pursuant to the laws of the state of Delaware, and having a mailing address and a place of business at 4955 Directors Place, San Diego, California 92121-1609, United States of America, and corporate headquarters at 55 Cambridge Parkway, Cambridge, Massachusetts 02142, United States of America,

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is desirous of acquiring the entire right, title and interest throughout the world in and to

said Inventions;

said International Patent Application;

any national or regional phase patent applications from said patent application (including applications under the European Patent Convention and national patent applications in the United States of America (including any nonprovisional applications converted to provisional applications, divisionals, continuations and continuations-in-part of said applications), or any other patent applications claiming the benefit of priority of said application),

any Letters Patent issued or granted from said patent applications by any national, regional or international patent-granting authority, including the United States Patent and Trademark Office, (including any reexamination and reissue applications of said Letters Patent, and any continuations or divisionals of said reexamination or reissue applications); and

all Convention or Treaty rights arising from said inventions, patent applications or Letters Patent, including without limitation, all rights under the Paris Convention for the Protection of Industrial Property, as currently revised and amended (including utility model and design protection);

NOW, THEREFORE, in consideration of good, valuable and sufficient consideration, the receipt of which is hereby acknowledged,

said Assignors have and by these presents do sell, assign, transfer and set over unto Verenium Corporation, its successors, legal representatives and assigns (hereinafter collectively referred to as the "Assignee"), the entire and exclusive right, title and interest throughout the world in and to said Inventions, said patent applications, any said Letters Patent, and said related rights to be vested, held, enjoyed by and for the use of said Assignee, to the full end of the terms for which each of said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by said Assignors, had this Assignment not been made;

AND for the same consideration, said Assignors hereby covenant and agree to and with said Assignee that,

said Assignors are the sole and lawful owners of the entire right, title and interest throughout the world in and to said Inventions, said patent applications, any said Letters Patent; and that the same are unencumbered and that said Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

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AND for the same consideration, said Assignors hereby covenant and agree to and with said Assignee, that whenever counsel of said Assignee shall advise that any proceeding in connection with said Inventions, patent applications, Letters Patent and related rights (including interference proceedings) is lawful and desirable,

to effectuate fully this Assignment, said Assignors shall sign all papers and documents, take all lawful oaths and do all acts necessary or required for the procurement, maintenance, enforcement or defense of said Letters Patent (including further reissue applications, assignments and preliminary statements) and to fully and properly vest, perfect, record and maintain the rights and title in said Letters Patent, without charge by said Assignors to said Assignee, but at reasonable cost and expense to said Assignee.

If for any reason said Assignee is unable to secure an Assignor's signature to any papers or documents described in the immediately preceding section, each Assignor hereby irrevocably designates and appoints said Assignee and its representatives as said Assignor's agents and attorneys-in-fact to execute said papers or documents on behalf and instead of said Assignor, all with the same legal force and effect as if executed by said Assignor.

Each Assignor hereby authorizes the Assignee to apply in all countries and patent-granting authorities in each Assignor's name or in the name of the Assignee for said patent applications and said related rights.

The Assignors hereby request and authorize the Assignee or the Assignee's authorized representatives in the United States or abroad to complete hereafter this Assignment by inserting, as needed, the serial numbers, filing dates, patent numbers, or grant dates for the applications or patents identified above, and to correct any clerical errors that may be necessary or desirable to record this Assignment.

The Assignors hereby request the Commissioner of Patents and/or the Director of the U.S. Patent and Trademark Office to issue said Letters Patent of the United States of America to said Assignee for the sole use of said Assignee.

This Assignment constitutes the entire agreement with respect to its subject matter and supersedes any prior or contemporaneous oral or written agreements concerning said subject matter. This Assignment shall be governed in all respects by the laws of the United States and the laws of the state of California. Each of the parties irrevocably consents, jointly and severally, to personal jurisdiction of the federal and state courts located in California.

This Assignment may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same document.

[signature page follows]

Assignment Page 3 of 7 D1240-13WO

EXECUTION OF ASSIGNMENT

In witness whereof, I hereto set my hand and seal at Son Dieso Conlideration, (city, state where executed) this day of fronth (year) David WEINER
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT
State of California County of San Diego On August 1, 2001, before me, Sen Decker, Notary Public, personally appeared David Weiner, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person or the entity upon behalf of which the person acted, execute the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the
foregoing paragraph is true and correct.
WITNESS my hand and official seal.
Notary Public Signature Notary Public SEAL

Assignment

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EXECUTION OF ASSIGNMENT

	·······	**************************************
In witness whereof, I hereto set my		Son Diego Con): For ning (city, state where executed)
this 4 days of 1/11	8.15	2000
this day of _/\limetrize{\psi_u}	(manth)	(1007) A A
(date)	****	P. While
		Peter LUGINBUHL
		\sim
CALIFORNIA ALI	L-PURPOSE AC	KNOWLEDGMENT
State of Colifornia	`	
State of Colifornia County of San Diego)	
County of San Diego)	
On Auturs 4, 2007, before	re me, <u>KNN</u>	FER I DECKER, Notary Public,
personally appeared Peter Lu	a in bull	, who proved to me on the basis of
satisfactory evidence to be the person	whose name is	subscribed to the within instrument and
		is authorized capacity, and that by his
	n or the entity i	pon behalf of which the person acted,
execute the instrument.		
I certify under PENALTY OF PERJ	URY under the I	aws of the State of California that the
foregoing paragraph is true and correct		
	40000000000	
Werrence was hand and ecciations		JENNIFER I. DECKER Commission # 1827883
WITNESS my hand and official seal.		87) Notary Public - California 🐉
		8 sin Gisepo Cousty seu Comm. Evolute Dec 22, 2012
	1	Ay Comm. Expires Dec 22, 2012
Joseph Delever		
Notary Public Signature		NOTARY PUBLIC SEAL
Assignment	Page 5 of 7	D1240-13WO

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EXECUTION OF ASSIGNMENT

In witness whereof, I hereto set my hand and seal at San Diego, Collifornia, (city, sale where executed)
this day of (date) day of (month) (year)
Analia BUENO
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT
State of California)
State of <u>California</u> County of <u>San Diego</u>
On August 4, 2007, before me, B. Siddons, Notary Public,
personally appeared Analia Burno, who proved to me on the basis of
satisfactory evidence to be the person whose name is subscribed to the within instrument and
acknowledged to me that he executed the same in his authorized capacity, and that by his
signature on the instrument the person or the entity upon behalf of which the person acted,
execute the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the
foregoing paragraph is true and correct.
WITNESS my hand and official seal. WITNESS my hand and official seal. WITNESS my hand and official seal. WITNESS my hand and official seal.
<u> </u>
Notary Public Signature NOTARY PUBLIC SEAL

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Assignment

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International Application No.: US2008/088675

EXECUTION OF ASSIGNMENT

In witness whereof, I hereto set n	ny hand and seal at	San Diego, Culifornia, (city, state where executed)
this day of	(month)	
CALIFORNIA A	<u> </u>	6slin CUENCA CNOWLEDGMENT
State of <u>California</u> County of <u>San Diego</u>		
		, who proved to me on the basis of abscribed to the within instrument and
acknowledged to me that he executed the same in his authorized capacity, and that by his		
signature on the instrument the person or the entity upon behalf of which the person acted, execute the instrument.		
I certify under PENALTY OF PER	UURY under the la	ws of the State of California that the
foregoing paragraph is true and corre	et.	٥
WITNESS my hand and official seal		B. SICCONS COMM. #1731776 #1 Noticy Public Collection SAM DESC COUNTY My Comm. Exp. March 16, 2011
<u> 12. 2 </u>		
Notary Public Signature		NOTARY PUBLIC SEAL
Assignment	Page 7 of 7	D1240-13WO

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RECORDED: 08/11/2009