PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: **NEW ASSIGNMENT** NATURE OF CONVEYANCE: **ASSIGNMENT**

CONVEYING PARTY DATA

Name	Execution Date
University of Pittsburgh Medical Center	07/30/2003

RECEIVING PARTY DATA

Name:	Rheogene Holdings, Inc.					
Street Address:	50 Eisenhower Avenue					
City:	Norristown					
State/Country:	PENNSYLVANIA					
Postal Code:	19403					

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	7091038

CORRESPONDENCE DATA

Fax Number: (412)209-1845

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

Phone: 4122974731

Email: jmartinez@cohenlaw.com Correspondent Name: Cohen & Grigsby, P.C. Address Line 1: 11 Stanwix Street

Address Line 2: 15th Floor

Address Line 4: Pittsburgh, PENNSYLVANIA 15222-1319

ATTORNEY DOCKET NUMBER:	10271.1INTREXON
NAME OF SUBMITTER:	Jennifer L. Martinez

Total Attachments: 8

source=4UPMCtoRheogeneHoldingsAssignment#page1.tif source=4UPMCtoRheogeneHoldingsAssignment#page2.tif source=4UPMCtoRheogeneHoldingsAssignment#page3.tif

REEL: 019077 FRAME: 0986

PATENT 500248774

source=4UPMCtoRheogeneHoldingsAssignment#page4.tif source=4UPMCtoRheogeneHoldingsAssignment#page5.tif source=4UPMCtoRheogeneHoldingsAssignment#page6.tif source=4UPMCtoRheogeneHoldingsAssignment#page7.tif source=4UPMCtoRheogeneHoldingsAssignment#page8.tif

ASSIGNMENT OF PATENTS

THIS ASSIGNMENT OF PATENTS is entered into as of July 30, 2003 (the "Effective Date") by and between the University of Pittsburgh Medical Center, a Pennsylvania nonprofit corporation (the "Assignor"), and RheoGene Holdings, Inc., a Delaware corporation ("Holdings").

RECITALS

- A. The Assignor has adopted, used and is using and owns all right, title and interest in and to the patents and applications for patents identified and set forth on Exhibit A attached hereto (collectively, the "Patents"), and the goodwill of the business associated with the Patents.
- B. The Assignor and Holdings have entered into that certain Asset Contribution Agreement dated as of July 30, 2003 (the "Contribution Agreement"). Capitalized terms used herein without definition shall have the respective meanings given to them in the Contribution Agreement.
- C. Pursuant to the Contribution Agreement, the Assignor has agreed to assign to Holdings its entire right, title and interest in and to the Patents.
- D. Pursuant to the Contribution Agreement, the Assignor wishes to assign the Patents to Holdings, and Holdings wishes to accept such assignment, on the terms and conditions set forth herein.

AGREEMENT

The parties, intending to be legally bound, agree as follows:

- 1. Assignment of Patents.
 - (a) The Assignor hereby, assigns and transfers all of its right, title and interest in and to the Patents to Holdings, its successors and assigns, to be held and enjoyed by Holdings for its use, enjoyment or conveyance, together with the goodwill of the business symbolized by the Patents.
 - (b) The Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks for the jurisdictions listed on Exhibit A with respect to each Patent, or such other appropriate official with respect to such jurisdiction, to record Holdings as the owner of, and to issue in accordance with this instrument, each of the Patents in the name of Holdings.
- 2. Successors and Assigns. This Assignment of Patents shall be binding on and inure to the benefit of the parties hereto and their respective successors and assigns.
- 3. Choice of Law. This Assignment of Patents shall be construed in accordance with, and governed in all respects by, the internal laws of the Commonwealth of Pennsylvania without reference to conflict of laws principles.
- 4. Counterparts. This Assignment of Patents may be signed in one or more counterparts, each of which shall be deemed an original and together which shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have executed and delivered this Assignment of Patents as of the date first written above.

Name:

Title: TREASURER

UNIVERSITY OF PITTSBURGH MEDICAL
CENTER

By:

When the state of the s

IN WITNESS WHEREOF, the parties have executed and delivered this Assignment of Patents as of the date first written above.

UNIVERSITY OF PITTSBURGH MEDICAL
CENTER
10.11
By: MW/Comm
Name: Scott M. LAMMIE
Title: SVP-FINANCE
RHEOGENE HOLDINGS, INC.
S want
By: Affel (mmm
Name: SCATT M. LAMMIE
Title: REASURER

COMMONWEALTH OF PENNSYLVANIA)	
COUNTY OF ALLEGHENY))	SS:

Before me, a Notary Public in and for said County and Commonwealth personally appeared Gott M. Lammie, SUP FINANCE of UPMC known to be or satisfactorily proven to be the person and officer whose name was subscribed to the within Assignment of Patents, and acknowledged that he executed the same on behalf of <u>UPMC</u>, as his voluntary act and deed for the purposes and consideration therein expressed and in the capacity therein given.

Therefore, I have set my hand and affixed my official seal on July 30, 2003.

(Seal)

Notarial Seal
Peggy J. Haberle, Notary Public
City of Pitisburgh, Allegheny County
My Commission Expires Aug. 22, 2005

Member, Pennsylvania Association of Notaries

EXHIBIT A

Assets

Patent and Patent Applications:

Dock	cet Patent/Ser	rial	Date	Issu	ie Title
#	#		Filed	Dai	11110
98-03	9A AR 990102	851 0	6/15/	99 pendi	
00.00				1	
98-03	9A AU 993390	0 0	6/07/	99 pendi	
			·	Fallar	
98-039	PA BR 9902283	34 00	5/16/9	99 pendi	
		- 1		Perion	"6 Ligatius for Modulating the Events
98-039		6,	/17/99	pendi	Genes via an Ecdysone Receptor Complex
	991090675	- 1	,	Perion	"6 Ligarius for Modulating the Evenses"
98-039	A EP 9930444	4.5 06	/08/9	9 pendir	
			,, >	Perion	b Eight us for Modulating the Evange:
98-039.	A JP 99171358	06	/17/9	9 pondia	
		"	, 1, , ,	9 pendin	b Light us for Modulating the Every
98-039,	A KR 9922745	06	/17/9	0	
	İ		/ 1/ / 5;	9 pendin	6 Ligarius for Modulating the Expression
98-039	A MX 995570	06	/16/99		
		100,	10/95	pendin	6 Ligarius IOI Modulating the Every
98-039	TW 8811023	0 00	/15 /00		
	11. 0011025	06/	/17/99	pending	5 Ligarius for Modulating the Evense:
98-039A	US 6258603	-	200 (5-		
	05 0230003	05/	20/99	7/10/0	Ligarius for Modulating the Event
98-039B	US 09/83250	<u> </u>			
. 0 0050	03 09/ 83250	0 04/	11/01	pending	Ligarius for Modulating the E
A01020	TIC CO (2010)				Genes via an Ecdysone Receptor Complex
2101020	US 60/19135	5 03/.	22/00	expired	Heterodimeric and Homedi
A01020A	DCT (Trees				Heterodimeric and Homodimeric Nuclear Receptor Gene Switches
TOTOZOM	1/ 0001/0	03/2	21/01	pending	Novel Ecdysopa Pagents B
A01020A	9050			-	Novel Ecdysone Receptor-Based Inducible Gene Expression System
AUIUZUA.	AR 010101339	03/2	22/01	pending	Novel Ecdysons B
01000 1				1	Novel Ecdysone Receptor-Based Inducible Gene Expression System
A01020A	CL 6422001	03/2	2/01	pending	1
07.000 :				1	Novel Ecdysone Receptor-Based Inducible Gene Expression System
01020A	TW 90106737	03/2	2/01	pending	1 Preparett DAS[6][]
		1	- 1	r - Linding	Novel Ecdysone Receptor-Based Inducible Gene
A0120A	US 10/239134	03/2	1/01	pending	1
			,	Perianig	Novel Ecdysone Receptor-Based Inducible Gene
0120A	AU	03/21	/01	pending	
		/	, 01	Penunig	Novel Ecdysone Receptor-Based Inducible Gene
.0120A	CA 2404253	03/21	/01	n on J:	
		00,21	/01	pending	Novel Ecdysone Receptor-Based Inducible Gene Expression System
0120A	CN	03/21	/01		
	01807844.3	03/21	/01	pending	Novel Ecdysone Receptor-Based Indusible Co.
0120A	JP 2001569016	02/21	/07		
)- - 001000010	03/21	\n1 1	pending	Novel Ecdysone Receptor-Based Inducible Gene
0120A	MX	00.75			- Apression system
	1	03/21/	′01 F	pending	Novel Ecdysone Receptor-Based Inducible Gene
	PA/A/2002/			-	Expression System

	00915			
A0120A		03/21/01	pending	Novel Ecdysone Receptor-Based Inducible Gene Expression System
A01020B	US 09/965,703	09/26/01	pending	
				
A01121	LIC 00 (600001	10 / 5 - 100		
·	US 09/690391		pending	Methods for Identifying Products Employing Gene Expression
A01121	AU 0178282	10/09/01	pending	Methods for Identifying Products Employing Gene Expression
A01121	BR 01045350	10/16/01	pending	Methods for Identifying Products Employing Gene Expression
A01121	CN 011358009	10/17/01	pending	Methods for Identifying Products Employing Gene Expression
A01121	EP 10308598.0	10/09/01	pending	Methods for Identifying Products Employing Gene Expression
A01121	JP 2001319364	10/17/01	pending	Methods for Identifying Products Employing Gene Expression
A01121	KR 2001163782	10/16/03	pending	Methods for Identifying Products Employing Gene
A01121	MX 2001010284	10/11/01	pending	Expression Methods for Identifying Products Employing Gene
A01121	TW 90125676	10/17/01	pending	Expression Methods for Identifying Products Employing Gene
A01121A	US 09/950312	09/10/01	pending	Expression Methods for Identifying Products Employing Gene
A01121	US 60/269799	02/20/01	expired	Expression Novel Ecdysone Receptor-Based Inducible Gene
A01183	US 60260700	01/10/01	expired	A Method to Reduce Transcriptional Interference
A01183	US 10074744	02/13/02	pending	Between Tandem Genes A Method to Reduce Transcriptional Interference
A01184	US 60/294814	05/31/01	pending	Between Tandem Genes Novel Ecdysone Receptor/Invertebrate Retinoid X
A01237	PCT/US02/0	02/20/02	pending	Receptor-Based Inducible Gene Expression System
A01238	5235			Novel Ecdysone Receptor/Invertebrate Retinoid X Receptor-Based Inducible Gene Expression System
	US 60/294819	05/31/01	expired	Chimeric Retinoid X Receptors and Their Use in a Novel Ecdysone Receptor-Based Inducible Gene Expression System
A01238	PCT/US02/0 5706	02/20/02	pending	Chimeric Retinoid X Receptors and Their Use in a Novel Ecdysone Receptor-Based Inducible Gene Expression System

			1	
A01258	US 60/301301	06 (07 (04		
A01248		1 7 7 7 2		A Method to Determine Gene Function
A01240	US 60/325534	09/26/01	expired	Whitefly Ecdysone Receptor Nucleic Acids
A01248	PCT/US02/0 5234	02/20/02	pending	The state of the s
A01284	US 60/325096	09/26/01	expired	Polypeptides, and Uses Thereof Leafhopper Ecdysone Receptor Nucleic Acids,
A01284	PCT/US02/0 5026	02/20/02	pending	Polypeptides, and Uses Thereof Leafhopper Ecdysone Receptor Nucleic Acids, Polypeptides, and Uses Thereof
A01310	US 60/329211	10/12/01	pending	Systems for Site Smarifica N
A01282	US 60/342,614	12/20/01	pending	Systems for Site Specific Alteration of Genomes In Vitro Biosensor Composition Containing a Ligand-
A01282A	US 60/342639	12/20/01	pending	In Vitro Biosensor Composition Containing Domain
A01308	US 60/348427	01/14/02	pending	Dependent Nuclear Receptor Ligand Binding Domain Minimal DNA Binding Domain Polynucleotides, Polypeptides, and Uses Thereof
A01381	US 60/466,233	02/10/03	pending	Diacylhydrazine ligands for modulating the expression
1.0				of exogenous genes in mammalian systems via an ecdysone receptor complex
A01494	US 60/449,467	02/21/03	pending	Oxadiazoline ligands for modulating the expression of exogenous genes via an ecdysone receptor complex
A01500	US	02/28/02		
2000	60/451,124	02/28/03	pending	Fluxinal boron-containing diacylhydrazine ligands for modulating the expression of exogenous genes in mammalian systems via an ecdysone receptor complex

Marks:

Trademark	Country	Statu	s App. No.	. Filing Date	Reg. No.	Reg. Date	Next Renewa
							1 Text Reliewa
EXPRESSIT	US	Pub.	75886182	03-Jan-2000			
GENEOFF	European Community	Reg.	001058114	26-Jan-1999	001058114	26-Jan-1999	26.7
GENEOFF GENEOFF IN	Japan	Reg.	707071998	21-Aug-1998	4306058	13-Aug-1999	26-Jan-2009 13-Aug-2009
CK CK		Reg.	707081998	21-Aug-1998	4306059	13-Aug-1999	
SENEON	European Community	Reg.	001058155	26-Jan-1999	001058155	26-Jan-1999	13-Aug-2009
ENEON ENEON IN	Japan	Reg.	707051998		4306056	13-Aug-1999	26-Jan-2009 13-Aug-2009
T/	Japan	Reg.	707061998	21-Aug-1998	4306057		13-Aug-2009

GENESWITCH		Reg.	0251761998	02-Mar-1998	4267036	23-Apr-1999	23-Apr-2009
GENESWITCH	Japan	Reg.	251 <i>7</i> 71998	27-Mar-1998	4283292	11-Jun-1999	11-Jun-2009
	European					12 juli 1000	11-1411-2009
GS	Community	Reg.	001058213	26-Jan-1999	001058213	26-Jan-1999	26-Jan-2009
GS	US	Reg.		23-Feb-2000	2539191	19-Feb-2002	19-Feb-2012
RHEOCEPT	US	Pub.	78072964	09-Jul-2001		7 7 65 2002	17-1-60-2012
RHEOCHEM	US	Pub.	!	09-Jul-2001			
RHEOSWITCH	US	Pub.	78030342	12-Oct-2000			
	US		T	04-Aug-1999			
RHEOGENE				1777			
& Design	US	Reg	76180837	14-Dec-2000	2509853	20-Nov-2001	20-Nov-2011

PATENT REEL: 019077 FRAME: 0995

RECORDED: 03/29/2007