Electronic Version v08 Stylesheet Version v02

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT OF ASSIGNOR'S INTEREST

CONVEYING PARTY DATA

Name	Execution Date	
Irving W. Wainer	2004-09-07	
Krzysztof JOZWIAK	2004-09-10	
Ruin Moaddel	2004-09-03	
S. RAVICHANDRAN	2004-09-08	
Jack R. COLLINS	2006-03-08	

RECEIVING PARTY DATA

Name	Street Address	Internal Address	City	State/Country	Postal Code
The Government of the United States of America, Represented by the Secretary, Department of Health and Human Services	6011 Executive	Suite 325	Rockville	IMD	20852- 3804

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number	10820809	

CORRESPONDENCE DATA

FAX NUMBER: (703) 205-8050

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

When the customer number has been provided, the Office of Public Records will obtain the correspondence data from the official record on file at the USPTO.

CUSTOMER NUMBER: 33883

NAME OF PERSON SIGNING:	Mark J. Nuell, Ph.D.
DATE SIGNED:	2006-03-15

Total Attachments: 10

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PATENT REEL: 017311 FRAME: 0455

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UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

	Application No. <u>10/820,809</u>		Filed April 9, 2004		
Insert Name(s) of Inventor(s)					
	WHEREAS,	Irving W. WAINER	Krzysztof JOZWIAK		
	Ruin MOADDEL	Sarangan RAVICHANDRAN	Jack R. COLLINS		
	(hereinafter designated as the v	undersigned) has (have) invented certain	new and useful improvements in		
Insert Title of Invention	COMPUTER-BASED MODE COMPETITIVE INHIBITORS GATED ION CHANNEL REC		CHARACTERIZATION FOR NON- RECEPTORS AND RELATED LIGAND-		
	for which an application for undersigned (except in the case	Letters Patent of the United States of of a provisional application).	America has been executed by the		
Insert Date of Signing of Application	on June 17, 2004; May 20, 200	14; May 18, 2004; June 1, 2004 and June	2, 2004, respectively; and		
Insert Name of Assignee	WHEREAS, <u>THE C</u>		ATES OF AMERICA DEPRESENTED		
Insert Address of Assignee		325, Rockville, Maryland 20852-3804			
CHECK BOX IF APPROPRIATE	its heirs, successors, legal representations acquiring the entire right, title a may be granted therefor in the U in any foreign countries.	sentatives and assigns (hereinafter design and interest in and to said invention and inited States of America and	nated as the Assignee) is desirous of in and to any Letters Patent(s) that		
	has (have) sold, assigned and to Assignee the full and exclusive dependencies and possessions at which may be granted therefore possessions, and if the box above	eration of the sum of Ten Dollars (\$10.0 cknowledged, and other good and valua ransferred, and by these presents does right to the said invention in the United of the entire right, title and interest in a for in the United States of America, the is designated, in any and all foreign contributions.	able consideration, the undersigned sell, assign and transfer unto said d States of America, its territories, and to any and all Letters Patent(s) its territories, dependencies and antries;		
	and to any and all divisions, reisterms for which the same may be	sues, continuations, conversions and ext	ensions thereof for the full term or		

Page 1 of 2

terms for which the same may be granted.

The undersigned agree (s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date 500 4,	Name of Inventor	Signature) Irving W. WAINER
Date,	Name of Inventor	(signature) Krzysztof JOZWIAK
Date,	Name of Inventor	(signature) Ruin MOADDEL
Date,	Name of Inventor	(signature) Sarangan RAVICHANDRAN
Date,	Name of Inventor	(signature) Jack R. COLLINS
Date,	Name of Inventor	(signature)

Page 2 of 2

February 2002

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

	Application No. <u>10/820,80</u>	9	Filed April 9, 2004
Insert Name(s) of Inventor(s)	***(Giv	en Name FAMILY NAME (ALL CAPS))***
	WHEREAS,	Irving W. WAINER	Krzysztof JOZWIAK
	Ruin MOADDEL	Sarangan RAVICHANDRAN	Jack R. COLLINS
	(hereinafter designated as the	he undersigned) has (have) invented certain	new and useful improvements in
Insert Title of Invention	COMPUTER-BASED MO COMPETITIVE INHIBITO GATED ION CHANNEL R	ODEL FOR IDENTIFICATION AND ORS OF NICOTINIC ACETYLCHOLINE RECEPTORS	CHARACTERIZATION FOR NON ECEPTORS AND RELATED LIGAND
	for which an application fundersigned (except in the context)	for Letters Patent of the United States of case of a provisional application).	America has been executed by the
Insert Date of Signing of Application	on June 17, 2004; May 20,	2004; May 18, 2004; June 1, 2004 and June	2, 2004, respectively ; and
nsert Name of Assignee	WHEREAS, <u>TH</u> <u>BY</u>	E GOVERNMENT OF THE UNITED ST THE SECRETARY, DEPARTMENT OF F	ATES OF AMERICA, REPRESENTED IEALTH AND HUMAN SERVICES
nsert Address of Assignee	of 6011 Executive Blvd., Su	nite 325, Rockville, Maryland 20852-3804	
CHECK BOX F APPROPRIATE	acquiring the entire right, to	epresentatives and assigns (hereinafter design tle and interest in and to said invention and ne United States of America and	nated as the Assignee) is desirous of in and to any Letters Patent(s) that
	has (have) sold, assigned at Assignee the full and exclusion dependencies and possession which may be granted the	nsideration of the sum of Ten Dollars (\$10.0 by acknowledged, and other good and value and transferred, and by these presents does sive right to the said invention in the Unite and the entire right, title and interest in a serefor in the United States of America, bove is designated, in any and all foreign contacts.	able consideration, the undersigned sell, assign and transfer unto said d States of America, its territories, and to any and all Letters Patent(s)
	and to any and all divisions,	reissues, continuations, conversions and ex	ensions thereof for the full term or

Page 1 of 2

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date,	Name of Inventor	
Date $09/10/04$,	Name of Inventor	(signature) Irving W. WAINER
Date,	Name of Inventor	(signature) Ruin MOADDEL
Date,	Name of Inventor	(signature) Sarangan RAVICHANDRAN
Date,	Name of Inventor	(signature) Jack R. COLLINS
Date,	Name of Inventor	(signature)

Page 2 of 2

February 2002

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

	Application No. <u>10/820,809</u>		Filed April 9, 2004			
Insert Name(s) of Inventor(s)	***(Given Name FAMILY NAME (ALL CAPS))***					
	WHEREAS,	Irving W. WAINER	Krzysztof JOZWIAK			
	Ruin MOADDEL	Sarangan RAVICHANDRAN	Jack R. COLLINS			
	(hereinafter designated as the	undersigned) has (have) invented certain	new and useful improvements in			
Insert Title of Invention	COMPUTER-BASED MODEL FOR IDENTIFICATION AND CHARACTERIZATION FOR NON-COMPETITIVE INHIBITORS OF NICOTINIC ACETYLCHOLINE RECEPTORS AND RELATED LIGAND-GATED ION CHANNEL RECEPTORS					
	for which an application for undersigned (except in the cas	Letters Patent of the United States of e of a provisional application).	America has been executed by the			
Insert Date of Signing of Application	on June 17, 2004; May 20, 20	04; May 18, 2004; June 1, 2004 and June	2, 2004, respectively ; and			
Insert Name of Assignee	WHEREAS, <u>THE BY TI</u>	GOVERNMENT OF THE UNITED ST HE SECRETARY, DEPARTMENT OF F	ATES OF AMERICA, REPRESENTED HEALTH AND HUMAN SERVICES			
Insert Address of Assignee	of 6011 Executive Blvd., Suite	325, Rockville, Maryland 20852-3804				
CHECK BOX IF APPROPRIATE	its heirs, successors, legal representation acquiring the entire right, title may be granted therefor in the in any foreign countries.	esentatives and assigns (hereinafter designand interest in and to said invention and United States of America and	nated as the Assignee) is desirous of in and to any Letters Patent(s) that			
	has (have) sold, assigned and Assignee the full and exclusive dependencies and possessions which may be granted there	deration of the sum of Ten Dollars (\$10.0 acknowledged, and other good and value transferred, and by these presents does to right to the said invention in the Unite and the entire right, title and interest in for in the United States of America, we is designated, in any and all foreign co	able consideration, the undersigned sell, assign and transfer unto said ed States of America, its territories, and to any and all Letters Patent(s)			
	and to any and all divisions, rei	issues, continuations, conversions and ex	tensions thereof for the full term or			

Page 1 of 2

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Date,	Name of Inventor	
		(signature) Irving W. WAINER
Date,	Name of Inventor	
Date <u>9-3 6H</u>	Name of Inventor	(signature) Krzysztof JOZWIAK
Date,	Name of Inventor	(signature) Ruin MOADDE
-	,	(signature) Sarangan RAVICHANDRAN
Date,		
		(signature) Jack R. COLLINS
Date,	Name of Inventor	(signature)
		(orginature)

Page 2 of 2

February 2002

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

	Application No. <u>10/820,809</u>		Filed April 9, 2004		
Insert Name(s) of Inventor(s)	***(Given Name FAMILY NAME (ALL CAPS))***				
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Insert Title of Invention	COMPUTER-BASED MOD COMPETITIVE INHIBITORS GATED ION CHANNEL REC	S OF NICOTINIC ACETYLCHOLINE F	CHARACTERIZATION FOR NON RECEPTORS AND RELATED LIGAND		
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Insert Name of Assignee	WHEREAS, <u>THE G</u> BY TI	GOVERNMENT OF THE UNITED ST HE SECRETARY, DEPARTMENT OF I	TATES OF AMERICA, REPRESENTED HEALTH AND HUMAN SERVICES		
Insert Address of Assignee	of 6011 Executive Blvd., Suite	325, Rockville, Maryland 20852-3804			
CHECK BOX IF APPROPRIATE	its heirs, successors, legal representation acquiring the entire right, title may be granted therefor in the in any foreign countries.	escntatives and assigns (hereinafter desig and interest in and to said invention and United States of America and	nated as the Assignee) is desirous of I in and to any Letters Patent(s) that		
	has (have) sold, assigned and Assignee the full and exclusive dependencies and possessions which may be granted there possessions, and if the box above	deration of the sum of Ten Dollars (\$10.0 acknowledged, and other good and valutransferred, and by these presents does eright to the said invention in the Unite and the entire right, title and interest in for in the United States of America, we is designated, in any and all foreign contents.	able consideration, the undersigned sell, assign and transfer unto said ed States of America, its territories, and to any and all Letters Patent(s), its territories, dependencies and puntries;		
	and to any and all divisions, rei	issues, continuations, conversions and ex	tensions thereof for the full term or		

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date,	Name of Inventor	
		(signature) Irving W. WAINER
Date,	Name of Inventor	
		(signature) Krzysztof JOZWIAK
Date,	Name of Inventor	
,	Tame of inventor	(signature) Ruin MOADDEL
29 /24 /24		
Date 34/04/04	Name of Inventor	6 Ravicker dram (signature) Sarangan RAVICHANDRAN
Date,	Name of Inventor	
		(signature) Jack R. COLLINS
Date,	Name of Inventor	
		(signature)

Page 2 of 2 February 2002

ATTORNEY DOCKET NO. 1173-1025PUS2

BIRCH, STEWART, KOLASCH & BIRCH, LLP

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

	Application No. 10/820,809		Filed <u>April 9, 2004</u>			
Insert Name(s) of Inventor(s)	***(Given Name FAMILY NAME (ALL CAPS))***					
	WHEREAS,	Irving W. WAINER	Krzysztof JOZWIAK			
	Ruin MOADDEL	Sarangan RAVICHANDRAN	Jack R. COLLINS			
	(hereinafter designated as the u	indersigned) has (have) invented certain	ncw and useful improvements in			
Insert Title of Invention	THE PERSON OF TH					
	for which an application for undersigned (except in the case	Letters Patent of the United States of a provisional application).	America has been executed by the			
Insert Date of Signing of Application	on June 17, 2004; May 20, 20	04; May 18, 2004; June 1, 2004 and Jun	e 2, 2004, respectively ; and			
Insert Name of Assignee	WHEREAS, THE BY T	GOVERNMENT OF THE UNITED S HE SECRETARY, DEPARTMENT OF	TATES OF AMERICA, REPRESENTED HEALTH AND HUMAN SERVICES			
Insert Address of Assignee	of 6011 Executive Blvd., Suite	e 325, Rockville, Maryland 20852-3804				
CHECK BOX IF APPROPRIATE	acquiring the entire right, title may be granted therefor in the in any foreign countries.	resentatives and assigns (hereinafter des e and interest in and to said invention a United States of America and	ignated as the Assignee) is desirous of nd in and to any Letters Patent(s) that			
	NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assigned the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;					
	and to any and all divisions, terms for which the same may	reissues, continuations, conversions and be granted.	extensions thereof for the full term or			

Page 1 of 2

Attorney Docket No. 1173-1025PUS2

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree (s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

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Date	Name of Inventor	the state of the s
		(signature) Irving W. WAINER
Date	Name of Inventor	(signature) Krzysztof JOZWIAK
Date	Name of Inventor	(signature) Ruin MOADDEL
Date	Name of Inventor	(signature) Sarapgan RAVICHANDRAN
Date 3/8/2006	Name of Inventor	(signature) Jack R. COLLINS
Date	Name of Inventor	(signature)

Page 2 of 2

February 2002

PATENT REEL: 017311 FRAME: 0466

RECORDED: 03/15/2006