

**PATENT ASSIGNMENT**

Electronic Version v1.1  
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
IGEN INTERNATIONAL, INC.	02/10/2004
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Proteinix, Inc.
<b>Street Address:</b>	930 Clopper Road
<b>City:</b>	Gaithersburg
<b>State/Country:</b>	MARYLAND
<b>Postal Code:</b>	20878
<b>PROPERTY NUMBERS Total: 4</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	5229272
Patent Number:	5593969
Patent Number:	5460960
Patent Number:	5641865
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(240)683-3794
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	2406312500
<b>Email:</b>	lkreisler@wellstatmanagement.com
<b>Correspondent Name:</b>	Wellstat BioCatalysis, LLC
<b>Address Line 1:</b>	930 Clopper Road
<b>Address Line 4:</b>	Gaithersburg, MARYLAND 20878
<b>ATTORNEY DOCKET NUMBER:</b>	PROTEINIX
<b>NAME OF SUBMITTER:</b>	Lewis J. Kreisler
Total Attachments: 16	

**CH \$160.00 5229272**

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**PATENT  
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## PATENT ASSIGNMENT

THIS AGREEMENT, effective the 10<sup>th</sup> day of February, 2004 ("Effective Date"), is by and between IGEN International, Inc., a Delaware corporation, having offices at 16020 Industrial Drive, Gaithersburg, Maryland 20877 (hereafter "IGEN"), and PROTEINIX, Inc., a Delaware corporation, having offices at 930 Clopper Road, Gaithersburg, Maryland 20878 (hereafter "PROTEINIX").

1. IGEN owns or co-owns all right, title, and interest in and to the intellectual property identified in Exhibit A attached hereto and to the inventions disclosed and claimed therein ("ASSIGNED PATENTS").
2. PROTEINIX is desirous of acquiring the entire right, title, and interest in and to the ASSIGNED PATENTS, pursuant to the Equity Right Purchase and License Amendment Agreement between the parties effective December 30, 2003.
3. For good and valuable consideration, receipt of which is hereby acknowledged, IGEN hereby assigns to PROTEINIX all right, title and interest in and to the ASSIGNED PATENTS, to the full end of the term for which the ASSIGNED PATENTS are granted, as fully and entirely as the same would have been held by the IGEN had this assignment not been made, together with all income, royalties, fees and payments, now or hereafter due in respect of the ASSIGNED PATENTS, each invention disclosed and claimed in any of the ASSIGNED PATENTS, including corresponding foreign applications and foreign patents and any substitutions, divisions, continuations, continuations-in-part, renewals, extensions, reissues, reexaminations, confirmations or registrations.
4. IGEN further assigns to PROTEINIX all causes of action for any and all acts of infringement of any ASSIGNED PATENTS that may have occurred prior to the date of this Assignment, however any damages recovered by Proteinix as a result of bringing any such causes of action, less a pro rata share of PROTEINIX's costs in recovering such damages, shall be given to IGEN to the extent such damages accrued prior to the Effective Date of this Patent Assignment; provided, however, that IGEN shall have no obligation or responsibility for any such costs unless and only to the extent any damages are otherwise payable to IGEN as a result of any such infringement.
5. IGEN hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents as described above to record this Assignment and, to the extent it assigns pending applications, to issue all Letters Patent issuing therefrom to PROTEINIX in accordance with the terms of this Assignment.
6. IGEN hereby agrees, without further consideration but at Proteinix's expense, to sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title in PROTEINIX to any ASSIGNED PATENTS and the inventions disclosed and claimed therein, to execute all divisional, continuation, continuation-in-part, reexamination, and reissue applications, it being understood that any expense incident to the execution of such papers shall be borne by PROTEINIX.

7. This Assignment and all rights granted herein shall inure to the benefit of the heirs, successors, and assigns of PROTEINIX.
8. This Agreement shall be construed and enforced pursuant to the laws of the State of Delaware and of the United States. The sole and official version of this Agreement is in the English language.

IN WITNESS WHEREOF, each party hereto has caused this Agreement to be executed by a duly authorized officer on the dates specified below.

Executed this 10<sup>TH</sup> day of February, 2004, at Gaithersburg, Maryland.

IGEN International, Inc.

PROTEINIX Corporation

By *Richard J. Massey*  
 Name RICHARD J. MASSEY  
 Title PRESIDENT

By *Samuel J. Wohlstadter*  
 Name Samuel J. Wohlstadter  
 Title Chairman

Date 2-10-04

Date 2/10/04

State of MARYLAND )  
 County of MONTGOMERY )

Before me personally appeared said RICHARD J. MASSEY  
 and acknowledged the foregoing instrument to be his free act and deed  
 this 10TH day of February, 2004.

*Barbara A. Bibbiani*  
 (Notary Public)

State of Maryland )  
 County of Montgomery )

Before me personally appeared said *Samuel J. Wohlstadter*  
 and acknowledged the foregoing instrument to be his free act and deed  
 this 10 day of February, 2004.

*Sharon J. Johnston*  
 (Notary Public)

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P14216IN0	IN	326/MAS/90		Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14218JP0	JP	507523/90		Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14214IL0	IL	94201	94201	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14270US0	US	08/274,306	5,599,538	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14220US0	US	08/259,151	5,602,015	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14215ZA0	ZA	90/3109	90/3109	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212EP0	EP	90907540.0	0 469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14213CA0	CA	2,015,377	2,015,377	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14219AU0	AU	56468/90	643437	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212UK0	UK	90907540.0	0 469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212FR0	FR	90907540.0	0 469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212SE0	SE	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212AT0	AT	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212BE0	BE	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212CH0	CH	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212DE0	DE	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212DK0	DK	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212ES0	ES	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212IT0	IT	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212LU0	LU	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14212NL0	NL	90907540.0	0469 060	Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14217KR0	KR	N/A		Autoantibodies Which Enhance the Rate of a Chemical Reaction
P14211WO0	WO	PCT/US90/02274	WO 90/13661	Autoantibodies Which Enhance the Rate of a Chemical Reaction

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P12028US0	US	07/730,125	5,156,965	Catalytic Antibodies
P12029US0	US	08/447,924		Catalytic Antibodies
MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P12023EP0	EP	85900344.4		Catalytic Antibodies as Chemical Sensors
P14322FR0	FR	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors

P12025JP0	JP	500123/85	2,540,508	Catalytic Antibodies as Chemical Sensors
P12024IL0	IL	73685	73685	Catalytic Antibodies as Chemical Sensors
P14325IL0	IL	88751	88751	Catalytic Antibodies as Chemical Sensors
P14322EP0	EP	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14322NL0	NL	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14322DE0	DE	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P12027CA0	CA	468,888	1,340,511	Catalytic Antibodies as Chemical Sensors
P14322SE0	SE	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14322IT0	IT	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14322BE0	BE	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14322LU0	LU	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14331AU0	AU	53110/94	669758	Catalytic Antibodies as Chemical Sensors
P14328AU0	AU	29496/89		Chemical Sensors Employing Catalytic Antibodies
P14322CH0	CH	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14322GB0	GB	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14322AT0	AT	89901650.5	0362304B1	Catalytic Antibodies as Chemical Sensors
P14329JP0	JP	501577/89	2662542	Catalytic Antibodies as Chemical Sensors
P14323CA0	CA	586,571	1,308,021	Catalytic Antibodies as Chemical Sensors
P14326ZA0	ZA	88/9546	88/9546	Catalytic Antibodies as Chemical Sensors
P14330KR0	KR	701599/1989	144002	Catalytic Antibodies as Chemical Sensors
P12022US0	US	08/090,245		Catalytic Antibodies as Chemical Sensors
P14321WO0	WO	PCT/US88/04426	WO 89/05977	Catalytic Antibodies as Chemical Sensors

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P09046US0	US	08/362,470	5,900,237	Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09044ZA0	ZA	94/2825	94/2825	Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P13137AU0	AU	84210/98	735176	Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P13130US0	US	08/524,920	6,479,265	Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09048JP0	JP	524409/94		Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09047CA0	CA	2,161,114		Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies

P09049AU0	AU	69423/94		Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09043IL0	IL	109,408		Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09050US0	US	09/241,876		Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09052IL0	IL	143554		Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09042EP0	EP	94917894.1		Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09051US0	US	09/817,502		Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies
P09041WO0	WO	PCT/US94/04437	WO 94/25573	Catalytic Antibodies Which Hydrolyze Primary Amides and Methods for Eliciting and Use of Such Antibodies

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P14965IA0	IN	241/MAS/91		Catalytic Antibody Components
P14964IL0	IL	97653	P/97653	Catalytic Antibody Components
P14963ZA0	ZA	91/2036	91/2036	Catalytic Antibody Components
P14968AU0	AU	75592/91	643776	Catalytic Antibody Components
P14970US0	US	08/402,158	5,658,753	Catalytic Antibody Components
P14966KR0	KR	702307/1992	244677	Catalytic Antibody Components
P14960US0	US	07/498,225	5,229,272	Catalytic Antibody Components
P14967EP0	EP	91907066.4	0 521 996	Catalytic Antibody Components
P14967AT0	AT	91907066.4	0 521 996	Catalytic Antibody Components
P14967BE0	BE	91907066.4	0 521 996	Catalytic Antibody Components
P14967CH0	CH	91907066.4	0 521 996	Catalytic Antibody Components
P14967DE0	DE	91907066.4	0 521 996	Catalytic Antibody Components
P14967FR0	FR	91907066.4	0 521 996	Catalytic Antibody Components
P14967LU0	LU	91907066.4	0 521 996	Catalytic Antibody Components
P14967GB0	GB	91907066.4	0 521 996	Catalytic Antibody Components
P14969JP0	JP	506650/91		Catalytic Antibody Components
P14962CA0	CA	2,038,911		Catalytic Antibody Components
P14961WO0	WO	PCT/US91/01948	WO 91/14769	Catalytic Antibody Components

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE

P12026JP1	JP	0012343/99	3158106		Catalytic Antibody Technology
P12026JP0	JP	419267/90	2919979		Catalytic Antibody Technology

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P14562EP0	EP	91905762.0	0 517 817	Catalytic Autoantibody Inhibition
P14562AT0	AT	91905762.0	0 517 817	Catalytic Autoantibody Inhibition
P14562BE0	BE	91905762.0	0 517 817	Catalytic Autoantibody Inhibition
P14562CH0	CH	91905762.0	0 517 817	Catalytic Autoantibody Inhibition
P14562DE0	DE	91905762.0	0 517 817	Catalytic Autoantibody Inhibition
P14562FR0	FR	91905762.0	0 517 817	Catalytic Autoantibody Inhibition
P14562IE0	IE	91905762.0	0 517 817	Catalytic Autoantibody Inhibition
P14562LU0	LU	91905762.0	0 517 817	Catalytic Autoantibody Inhibition
P14562GB0	GB	91905762.0	0 517 817	Catalytic Autoantibody Inhibition

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P14569IN0	IN	167/MAS/91		Inhibitors of Catalytic Antibodies
P14568ZA0	ZA	91/1292	91/1292	Inhibitors of Catalytic Antibodies
P14560US0	US	07/486,594	5,194,585	Inhibitors of Catalytic Antibodies
P14565KR0	KR	702083/1992	193700	Inhibitors of Catalytic Antibodies
P14563AU0	AU	74660/91	657678	Inhibitors of Catalytic Antibodies
P14567IL0	IL	97333	97333	Inhibitors of Catalytic Antibodies
P14571US0	US	08/478,285	6,048,717	Inhibitors of Catalytic Antibodies
P14566CA0	CA	2,037,199		Inhibitors of Catalytic Antibodies
P14564JP0	JP	506071/91		Inhibitors of Catalytic Antibodies
P	EP	91905762.0		Inhibitors of Catalytic Antibodies
P14561WO0	WO	PCT/US91/01320	WO91/12812	Inhibitors of Catalytic Antibodies

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P12264JP0	JP	505272/89		Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242AT0	AT	89905519.8	0414755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment



P12242BE0	BE	89905519.8	0414755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242SE0	SE	89905519.8	0 414 755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12240US0	US	07/938,489	5,314,642	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242DE0	DE	68927347.9	0414755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242FR0	FR	89905519.8	0414755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242GB0	GB	89905519.8	0414755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242IT0	IT	89905519.8	0414755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242NL0	NL	89905519.8	0414755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242CH0	CH	89905519.8	0 414 755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242LU0	LU	89905519.8	0 414 755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12243CA0	CA	598,144	1,340,526	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12242EP0	EP	89905519.8	0414755	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12244IL0	IL	90103	90103	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12245ZA0	ZA	89/3106	89/3106	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12247AU0	AU	3558789	641357	Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12241WO0	WO	PCT/US89/01804		Interaction System Comprising a Surfactant-Stabilized Aqueous Phase Containing an Antibody Fragment
P12250US0	US	08/188,571	5,641,865	Interaction System Comprising a Surfactant-stabilized Disperse Aqueous Phase Containing an Antibody or Antibody Fragment
P12252EP0	EP	89905519.8	0414755	Interaction System Comprising a Surfactant-stabilized Disperse Aqueous Phase Containing an Antibody or Antibody Fragment

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P16036BY0	BY	9302903		Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16032CA0	CA	2126341		Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16033ZA0	ZA	93/2028	93/2028	Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16034IL0	IL	105,131	105131	Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16030US0	US	08/123,590	5,593,969	Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16039KR0	KR	703336/1994	278083	Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16035AU0	AU	39390/93	667900	Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16090US0	US	08/405,438	5,597,573	Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16039KR1	KR	25735/2000	288718	Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16038JP0	JP	517591/93		Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16037EP0	EP	93908634.4		Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral
P16031WO0	WO	PCT/US93/02903	WO 93/19761	Lipid A Analogs: New Monosaccharide and Disaccharide Intermediates for Eliciting Therapeutic Antibodies and for Antitumor and Antiviral

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P13470EP0	EP	01981451.6		Methods and Compositions for Modifying Biologically Active Target Molecules
P13469US0	US	60/242,125		Methods and Compositions for Modifying Biologically Active Target Molecules
P13471US0	US	10/039,471		Methods and Compositions for Modifying Biologically Active Target Molecules
P13470WO0	WO	PCT/US01/31663	WO 02/034933	Methods and Compositions for Modifying Biologically Active Target Molecules

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE

P14533CA0	CA	2,018,453			Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532GB0	GB	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14534IL0	IL	94666	P/94666		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532BE0	BE	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532EP0	EP	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532DK0	DK	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532LU0	LU	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532ES0	ES	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532AT0	AT	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532IT0	IT	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532CH0	CH	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532NL0	NL	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532SE0	SE	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532DE0	DE	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14532FR0	FR	90910051.3	0476059		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14535ZA0	ZA	90/4457	90/4457		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14537AU0	AU	58424/90	652342		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14538AU1	AU	669,310	669310		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14530US0	US	08/479,849	6,521,432		Methods for Enhancing the Rate of Modification of Metastable Bonds
P14536JP0	JP	509096/90			Methods for Enhancing the Rate of Modification of Metastable Bonds
P14539JP0	JP	177601/98			Methods for Enhancing the Rate of Modification of Metastable Bonds
P14531WO0	WO	PCT/US90/03226	WO 90/15074		Methods for Enhancing the Rate of Modification of Metastable Bonds

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P12024IL0	IL	73685	73685	Method for Producing Antibodies Which Catalyze Chemical Reactions
P12025JP0	JP	500123/85	2540508	Method for Producing Antibodies Which Catalyze Chemical Reactions
P12021US0	US	07/411,547	5,037,750	Method for Producing Antibodies Which Catalyze Chemical Reactions
P14390US0	US	08/478,355	5,658,752	Method of catalyzing Chemical Reactions
MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P12018AU0	AU	42132/89		Method of Catalyzing Stereochemical Reactions
P12017JP0	JP	509369/89		Method of Catalyzing Stereochemical Reactions
P12015ZA0	ZA	89/6408	89/6408	Method of Catalyzing Stereochemical Reactions
P12019AU0	AU	41956/93	657864	Method of Catalyzing Stereochemical Reactions
P12020US0	US	06/674,253	4,888,281	Method of Catalyzing Stereochemical Reactions
P12045US0	US	08/478,954	6,057,121	Method of Catalyzing Stereochemical Reactions
P12014IL0	IL	91397		Method of Catalyzing Stereochemical Reactions
P12012WO0	WO	PCT/US89/03696	WO 90/02192	Method of Catalyzing Stereochemical Reactions

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P13508AU0	AU	30680/92	662191	Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State
P13504ZA0	ZA	92/8580	92/8580	Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State
P13500US0	US	07/789,344	5,318,897	Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State
P13503IL0	IL	103685	P/103685	Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State
P13507KR0	KR	702049/92	270981	Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State
P13502EP0	EP	92924332.7		Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State
P13506JP0	JP	508751/93		Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State

P13505CA0	CA	2,100,060		Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State
P13501WO0	WO	PCT/US92/09576	WO93/09247	Monoclonal Antibody and Antibody Components Elicited to a Polypeptide Antigen Ground State

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P12696ZA0	ZA	89/3284	89/3284	Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12697JP0	JP	506288/89	2772088	Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12695IL0	IL	90200	90200	Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12698AU0	AU	37393/89	643186	Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12692EP0	EP	89906570.0	0 413,762	Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12694CA0	CA	598,754	1,340,485	Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12690US0	US	08/134,492		Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12703EP0	EP	96918312.8		Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12700US0	US	08/471,140		Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12701US0	US	08/476,075		Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12691WO0	WO	PCT/US89/01951	WO 89/10961	Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies
P12702WO0	WO	PCT/US96/09450	WO 96/39443	Peptide Analogs and Their Use as Haptens to Elicit Catalytic Antibodies

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P13569JP0	JP	503832/93		Prodrugs Activated by Targeted Catalytic Proteins
P13566IL0	IL	102743		Prodrugs Activated by Targeted Catalytic Proteins
P13568CA0	CA	2,114,934		Prodrugs Activated by Targeted Catalytic Proteins
P13560US0	US	08/325,540		Prodrugs Activated by Targeted Catalytic Proteins
P13573CN0	CN	96123479.2		Prodrugs Activated by Targeted Catalytic Proteins
P13572NZ0	NZ	280603	280603	Prodrugs Activated by Targeted Catalytic Proteins

P13564ZA0	ZA	92/5882	92/5882	Prodrugs Activated by Targeted Catalytic Proteins
P13571NZ0	NZ	243852	243852	Prodrugs Activated by Targeted Catalytic Proteins
P13567AU0	AU	24408/92	673335	Prodrugs Activated by Targeted Catalytic Proteins
P13550US0	US	08/325,554	6,258,360	Prodrugs Activated by Targeted Catalytic Proteins
P13570KR0	KR	700369/1994	333023	Prodrugs Activated by Targeted Catalytic Proteins
P13574KR0	KR	7011701/1999	334695	Prodrugs Activated by Targeted Catalytic Proteins
P13576KR0	KR	7011703/1999	334697	Prodrugs Activated by Targeted Catalytic Proteins
P13563CN0	CN	92110882.6		Prodrugs Activated by Targeted Catalytic Proteins
P13565TW0	TW	81106818		Prodrugs Activated by Targeted Catalytic Proteins
P13530US0	US	08/392,407		Prodrugs Activated by Targeted Catalytic Proteins
P13575KR0	KR	7011702/1999		Prodrugs Activated by Targeted Catalytic Proteins
P13562EP0	EP	92917526.3		Prodrugs Activated by Targeted Catalytic Proteins
P13560US2	US	N/A		Prodrugs Activated by Targeted Catalytic Proteins
P13560US1	US	10/205,115		Prodrugs Activated by Targeted Catalytic Proteins
P13561WO0	WO	PCT/US92/06530	WO 93/02703	Prodrugs Activated by Targeted Catalytic Proteins

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P14003JP0	JP	156408		Production of Antibody Catalysts
P14005US0	US	08/073,285	5,401,641	Production of Antibody Catalysts
P14002EP0	EP	87108876.1	0251093	Production of Antibody Catalysts
P14001US0	US	07/064,239	4,963,355	Production of Antibody Catalysts
P14000US0	US	06/877,273	4,792,446	Production of Antibody Catalysts
P14002CH0	CH	87108876.1	0251093	Production of Antibody Catalysts
P14002NL0	NL	87108876.1	0251093	Production of Antibody Catalysts
P14002IT0	IT	87108876.1	0251093	Production of Antibody Catalysts
P14002FR0	FR	87108876.1	0251093	Production of Antibody Catalysts
P14002DE0	DE	87108876.1	0251093	Production of Antibody Catalysts
P14002GB1	GB	87108876.1	0251093	Production of Antibody Catalysts
P14002SE0	SE	87108876.1	0251093	Production of Antibody Catalysts
P14002GB0	GB	87108876.1	0 251 093	Production of Antibody Catalysts

MATTER No. No.	CO	SERIAL No.	PATENT No.	TITLE
P14033IT0	IT	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033BE0	BE	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033AT0	AT	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033EP0	EP	88113744.2	0350870	Production of Immunoproximity Catalysts
P14036IL0	IL	87582	092230	Production of Immunoproximity Catalysts

P14033NO0	NO	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033FI0	FI	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033BR0	BR	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033SP0	SP	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033GB0	GB	8820172.8	2,209,340	Production of Immunoproximity Catalysts
P14042KR0	KR	700789/1989	118430	Production of Immunoproximity Catalysts
P14033CH0	CH	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033DE0	DE	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033SE0	SE	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033FR0	FR	88113744.2	0305870	Production of Immunoproximity Catalysts
P14033NL0	NL	88113744.2	0305870	Production of Immunoproximity Catalysts
P14032CA0	CA	576,478	1,340,534	Production of Immunoproximity Catalysts
P14030US0	US	08/187,810	5,460,960	Production of Immunoproximity Catalysts
P14033ES0	ES	88113744.2	030570	Production of Immunoproximity Catalysts
P14038ZA0	ZA	88/6483	88/6483	Production of Immunoproximity Catalysts
P14037CN0	CN	88107059.9	58179	Production of Immunoproximity Catalysts
P14031WO0	WO	PCT/US88/02900	WO 89/01784	Production of Immunoproximity Catalysts

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P13586BY0	BY	02187/113		Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13585AU0	AU	37761/93	104,839	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13583ZA0	ZA	93/1263	93/1263	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13584IL0	IL	104829	104829	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13600US0	US	08/748,415	5,891,648	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13580US0	US	08/377,495	5,631,137	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13590US0	US	08/747,654	6,121,007	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13601US1	US	09/235,353	6,177,270 B1	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582EP0	EP	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties

P13582AT0	AT	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582BE0	BE	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582CH0	CH	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582DE0	DE	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582FR0	FR	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582IT0	IT	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582NL0	NL	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582SE0	SE	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582GB0	GB	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13582ES0	ES	93907001.7	0 631 633	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13588JP0	JP	515,036/93		Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13589KR0	KR	702935/1994		Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13587CA0	CA	2,125,405		Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13591EP0	EP	02001074.0		Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties
P13581WO0	WO	PCT/US93/01616	WO 93/17124	Reaction-Based Selection for Expression of and Concentration of Catalytic Moieties

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P090000US0	US	08/273,146	5,855,885	The Isolation and Production of Catalytic Antibodies Using Phage Technology
P09004AU0	AU	70141/94	695406	The Isolation and Production of Catalytic Antibodies Using Phage Technology



P09003CA0	CA	2,186,469		The Isolation and Production of Catalytic Antibodies Using Phage Technology
P09005JP0	JP	7-525622		The Isolation and Production of Catalytic Antibodies Using Phage Technology
P09002EP0	EP	94919078.9		The Isolation and Production of Catalytic Antibodies Using Phage Technology
P09001WO0	WO	PCT/US94/03420	WO 95/27045	The Isolation and Production of Catalytic Antibodies Using Phage Technology

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P14502IT0	IT	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14502CH0	CH	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14502GB0	GB	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14502SE0	SE	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14502LU0	LU	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14502NL0	NL	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14502FR0	FR	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14502BE0	BE	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P1450201	AT	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14502DE0	DE	89906520.5	0436545	Therapeutic Methods Using Catalytic Antibodies
P14507EP0	EP	95111577.3	0701818	Therapeutic Methods Using Catalytic Antibodies
P14504JP0	JP	505991789	2931609	Therapeutic Methods Using Catalytic Antibodies
P14502EP0	EP	89906520.5	436,545	Therapeutic Methods Using Catalytic Antibodies
P14505AU0	AU	37304/89	638405	Therapeutic Methods Using Catalytic Antibodies
P14503CA0	CA	598,697		Therapeutic Methods Using Catalytic Antibodies
P14506JP0	JP	211311/98		Therapeutic Methods Using Catalytic Antibodies
P14501WO0	WO	PCT/US89/01950	WO 89/10754	Therapeutic Methods Using Catalytic Antibodies
P14500US0	US	07761,868		Therapeutic Methods Using Catalytic Antibodies

MATTER No.	CO	SERIAL No.	PATENT No.	TITLE
P12120US0	US	08/333,237	5,952,462	Transition State Analogs
P12124CA0	CA	598,794		Transition State Analogs
P12121US1	US	09/303,716		Transition State Analogs

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EXHIBIT A

and all continuations, divisionals, continuations-in-part, substitutions, reissues, reexaminations, renewals, extensions, confirmation patents, registration patents, patents of addition, and foreign counterparts of any of the above, as well as patents and patent applications that claim priority to a priority application of one or more of the above.