PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3623309

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
THERACLONE SCIENCES, INC.	10/01/2015

RECEIVING PARTY DATA

Name:	MIDCAP FINANCIAL TRUST
Street Address:	C/O MIDCAP FINANCIAL SERVICES, LLC, AS SERVICER
Internal Address:	7255 WOODMONT AVE., SUITE 200
City:	BETHESDA
State/Country:	MARYLAND
Postal Code:	20814

PROPERTY NUMBERS Total: 37

Property Type	Number
Application Number:	12269781
Application Number:	13215841
Application Number:	13914380
Application Number:	12726297
Application Number:	13772976
Application Number:	12401585
Application Number:	13109632
Application Number:	13486569
Application Number:	14323537
Application Number:	12617243
Application Number:	13523710
Application Number:	14594461
Application Number:	12766444
Application Number:	13321460
Application Number:	14513973
Application Number:	12855553
Application Number:	14642194
Application Number:	13208754
Application Number:	14557515

PATENT REEL: 037146 FRAME: 0817

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Property Type	Number
Application Number:	13418923
Application Number:	13372870
Application Number:	14578777
Application Number:	13596463
Application Number:	14449948
Application Number:	14256352
PCT Number:	US2014034632
Application Number:	14256345
PCT Number:	US2014034634
Application Number:	14263305
PCT Number:	US2014035675
Application Number:	61378604
Application Number:	12726245
Application Number:	61386940
Application Number:	14692483
Application Number:	61476978
Application Number:	61515548
Application Number:	13780776

CORRESPONDENCE DATA

Fax Number: (404)443-5697

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 404-443-5648

Email: lallen@mcguirewoods.com
Correspondent Name: KIMBERLY SCOTT, ESQ.
Address Line 1: MCGUIREWOODS LLP

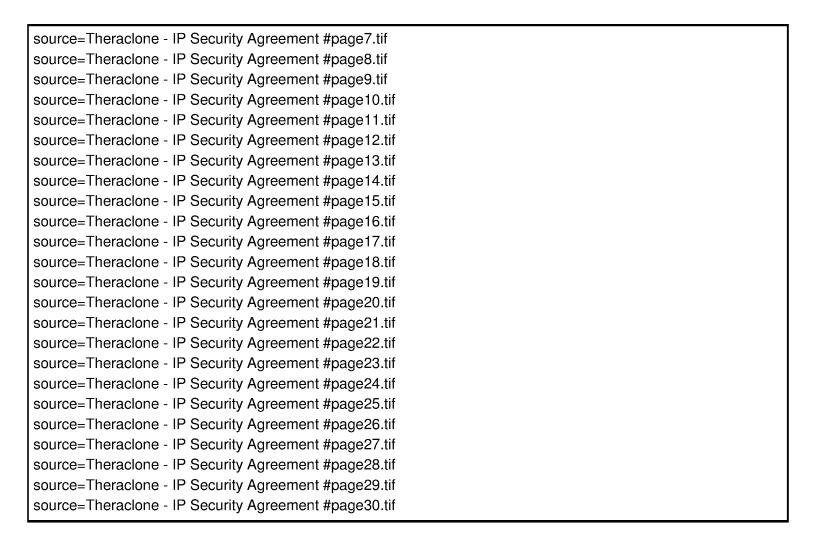
Address Line 2: 1230 PEACHTREE STREET, N.E., SUITE 2100

Address Line 4: ATLANTA, GEORGIA 30309

ATTORNEY DOCKET NUMBER:	2061695-0014 THERACLONE
NAME OF SUBMITTER:	LATOSHA E. ALLEN
SIGNATURE:	/Latosha E. Allen/
DATE SIGNED:	11/19/2015

Total Attachments: 30

source=Theraclone - IP Security Agreement #page1.tif source=Theraclone - IP Security Agreement #page2.tif source=Theraclone - IP Security Agreement #page3.tif source=Theraclone - IP Security Agreement #page4.tif source=Theraclone - IP Security Agreement #page5.tif source=Theraclone - IP Security Agreement #page6.tif



INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of the 1st day of October 2015 by and among MIDCAP FINANCIAL TRUST, a Delaware statutory trust, ("Agent"), THERACLONE SCIENCES, INC., a Delaware corporation (the "Grantor").

RECITALS

- A. The Lenders (as defined below) have agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "Credit Extensions") in the amounts and manner set forth in that certain Credit and Security Agreement by and among Agent, the financial institutions party thereto from time to time (collectively, the "Lenders"), and Grantor, dated as March 11, 2013 (as the same may be amended, modified or supplemented from time to time, the "Credit Agreement"; capitalized terms used herein are used as defined in the Credit Agreement). The Lenders are willing to make the Credit Extensions to Grantor, but only upon the condition, among others, that Grantor shall grant to Agent, for the ratable benefit of the Lenders, a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Credit Agreement.
- B. Pursuant to the terms of the Credit Agreement, Grantor has granted to Agent, for the ratable benefit of the Lenders, a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral (as specifically defined in the Credit Agreement).
- NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Credit Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

<u>AGREEMENT</u>

To secure its obligations under the Credit Agreement, each Grantor grants and pledges to Agent, for the ratable benefit of the Lenders, a security interest in all of such Grantor's right, title and interest in, to and under its intellectual property (all of which shall collectively be called the "Intellectual Property Collateral"), including, without limitation, the following:

- (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 that may be available to such Grantor now or hereafter existing, created, acquired or held;

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- (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 <u>Exhibit B</u> attached hereto (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 such Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");
- (f) All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the "Mask Works");
- (g) Any and all claims for damages by way of past, present and future infringements 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;
- (h) All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;
- (i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and
- (j) 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.

This security interest is granted in conjunction with the security interest granted to Agent, for the ratable benefit of the Lenders, under the Credit Agreement. The rights and remedies of Agent with respect to the security interest granted hereby are in addition to those set forth in the Credit Agreement and the other Financing Documents, and those which are now or hereafter available to Agent as a matter of law or equity. Each right, power and remedy of Agent provided for herein or in the Credit Agreement or any of the Financing Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Agent of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Credit Agreement or any of the other Financing Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Agent, of any or all other rights, powers or remedies.

[Remainder of page intentionally blank; signature page follows.]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

THERACLONE SCIENCES, INC.

Theraclone Sciences, Inc. 1124 Columbia Street, Suite 300 Seattle, Washington 98104 Attention: Russ Hawkinson

Fax: (206) 805-1699

E-Mail: RHawkinson@theraclone-sciences.com

THERACLONE SCIENCES, INC. INTELLECTUAL PROPERTY SECURITY AGREEMENT SIGNATURE PAGE

AGENT:

Address of Agent:

MidCap Financial Trust c/o MidCap Financial Services, LLC, as servicer 7255 Woodmont Ave, Suite 200

Bethesda, MD 20814

Attn: Account Manager for Theraclone transaction

Facsimile: 301-941-1450

Email: notices@midcapfinancial.com

MIDCAP FINANCIAL TRUST

By: Apollo Capital Management, L.P.,

its investment manager

By: Apollo Capital Management GP, LLC,

(SEAL)

its general partner

Ву:_____

Name: Maurice Amsellem Title: Authorized Signatory

EXHIBIT A

Copyrights

None.

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EXHIBIT B

Patents

[See attached]

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Cook	THEI 31618	THEI 31618	ТНЕН 31618	ТНЕН 31618		THEF 31618
Cooley Docket No.	THER-003/N01AU 316188-2019	THER-003/D01AU 316188-2012	THER-003/N01BR 316188-2021	THER-003/N01CA 316188-2022	THER-003/N01CN 316188-2024	
ML Docket No.	37418- 503N01AU	37418- 503D01AU	37418- 503N01BR	37418- 503N01CA	37418- 503N01CN	37418-
Туре	PCT	DIV	PCT	PCT	PCT	
Status	Granted	Pending	Pending	Pending	Granted	1
Serial Number	2008321016 (Patent No. 2008321016)	2013206604	PI0820053-0	2705555	200880123932.8	
Filing Date	12-Nov-2008	12-Nov-2008	12-Nov-2008	12-Nov-2008	12-Nov-2008	12-Nov-2008
Country	Australia	Australia	Brazil	Canada	China (People's Republic)	China (Peonle's
Title	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy
Description	Influenza M2e: Compositions and Methods for the Therapy	and Diagnosis of Influenza: Encompasses antibodies 8110, 21B15 and 23K12. Also encompasses epitopes linear and non-linear epitopes of the	specifically, comprises the amino-terminal region of the M2e polypeptide, the amino acid at position 2, 5, and 6 of the M2e polypeptide, wherein	amino acid position numbers are in accordance with MSLLTEVETPTRNEWGCR CNDSSD (SEQ ID NO: 1), wherein the amino acid at position 2 is a serine; position	5 is a threonine; and position 6 is a glutamic acid, and wherein said epitope wholly of partially includes the amino acid sequence SLLTEV (SEQ ID NO: 42). (Claims to 8110	are elected)
Action Due	None	None	None	Response to Office Action	None	None
Deadline				09/24/2015 (Final)		

THERACLONE CASE LIST

THER-003/N01JP 37418-316188-2037 503N01	THER-003/N01IL 3741 316188-2034 503N	THER-003/N01IN 3741 316188-2035 503N	THER-003/D01HK N/A	THER-003/N01HK 3741 316188-2032 503N	THER-003/N01EP 3741 316188-2027 503N	Cooley Docket No. ML
JP	37418- 503N01IL	37418- 503N01IN		37418- 503N01HK	37418- 503N01EP	ML Docket No.
PCT	PCT	PCT	REG	REG	PCT	Туре
Granted	Pending	Published	Pending	Granted	Granted	Status
2010-527260 (Patent No. 4932940)	205705	1815/KOLNP/201 0	15102928.6	11101919.3 (HK Patent No. HK1147767)	08850112.7 (EP Pub. No. 2220116)	Serial Number
12-Nov-2008	12-Nov-2008	12-Nov-2008	12-Nov-2008	12-Nov-2008	12-Nov-2008	Filing Date
Japan	Israel	India	Hong Kong	Hong Kong	European Patent Convention (Validated in Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherland s, Norway, Portugal, Spain, Sweden, Switzerland and	Country
Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Title
						Description
None	Response to Office Action	None	None	Maintenance Fee Due	None	Action Due
	10/3/2015			10/12/2016		Deadline

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	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	United States of America	23-Aug-2011	13/215841 (Patent No. 8,460,671)	Granted	CON	37418- 503C01US	THER-003/C01US 316188-2010
	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	United States of America	12-Nov-2008	12/269781 (Patent No. 8,057,796)	Granted	ORD	37418- 503001US	THER-003/001US 316188-2007
	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	Taiwan	12-Nov-2009	103141976	Pending	DIV	N/A	THER-003/D01TW 316188-2177
	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	Taiwan	12-Nov-2009	98138407	Published	ORD	37418- 503001TW	THER-003/001TW 316188-2006
	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	Singapore	12-Nov-2008	201003325-6 (Patent No. 161495)	Granted	PCT	37418- 503N01SG	THER-003/N01SG 316188-2045
	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	New Zealand	12-Nov-2008	585500 (Patent No. 585500)	Granted	PCT	37418- 503N01NZ	THER-003/N01NZ 316188-2042
	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	Mexico	12-Nov-2008	MX/a/2010/00524 4 (Patent No. 312017)	Granted	PCT	37418- 503N01MX	THER-003/N01MX
	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	Korea, Republic of	12-Nov-2008	10-2010-7012975	Pending	PCT	37418- 503N01KR	THER-003/N01KR 316188-2038
	None		Compositions And Methods For The Therapy And Diagnosis Of Influenza	Japan	12-Nov-2008	2011-105659 (Patent No. 5623332)	Granted	DIV	37418- 503D01JP	THER-003/D01JP 316188-2014
Deadline	Action Due	Description	Title	Country	Filing Date	Serial Number	Status	Туре	ML Docket No.	Cooley Docket No.

THER-004/N01CN 316188-2058	THER-004/N01CA 316188-2057	THER-004/D01AU 316188-2180	THER-004/N01AU 316188-2056	THER-003/D02US 316188-2017	THER-003/D01US 316188-2016	THER-003/C02US 316188-2011	Cooley Docket No.
37418- 504N01CN	37418- 504N01CA	N/A	37418- 504N01AU	37418- 503D02US	37418- 503D01US	37418- 503C02US	ML Docket No.
PCT	PCT	VID	PCT	DIV	DIV	CON	Туре
Granted	Pending	Pending	Allowed	Published	Granted	Published	Status
200980116708.0	2718878	2015201280	2009223688	13/772976	12/726297 (Patent No. 8,114,402)	13/914380	Serial Number
10-Mar-2009	10-Mar-2009	10-Mar-2009	10-Mar-2009	21-Feb-2013	17-Mar-2010	10-Jun-2013	Filing Date
China (People's Republic)	Canada	Australia	Australia	United States of America	United States of America	United States of America	Country
Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Title
	encompasses epitopes of the glycoprotein b (gB) envelope protein of the CMV virus, and specifically, wherein said epitope comprises the antigenic determinant 2 site 1 of gB, gp116.	HCMV: Compositions and Methods for the Therapy and Diagnosis of Cytomegalovirus Encompasses antibodies 2F10, 2M16, 2N9, 3C21, 4P12, 5P9, and 9C16, Further		Influenza M2e: Identical to 503 disclosure with addition of longer sequences for 8i10 and 23K12. Incorporates PNAS manuscript. This is a DIV of USSN 12/795618 (37418-503002US).	Influenza M2e: Identical to disclosure of USSN 12/269781 (claims to 23K12 are elected).		Description
None	None	None	None	None	None	Response to Office Action Due	Action Due
						08/08/2015 (Initial) 11/08/2015 (Final)	Deadline

THER-004/MOLIP 316188-2063	THER-004/D01IL 316188-2178	THER-004/NOTIL 316188-2061	THER-004/NOTIN 316188-2062	THER-004/NOTHK 316188-2060	THER-004/NOTEP 316188-2059	Cooley Docket No.
37418- 504N01IP	N/A	37418- 504N01IL	37418- 504N01IN	37418- 504NOTHK	37418- 504N01EP	ML Docket No.
PCT	AIG	PCT	PCT	REG	РСТ	Туре
Granted	Pending	Ренбіпд	Published	Published	Allowed	Status
2010-550824 (Pat. No. 5544309)	236601	208086	3400/KOLNP/201 0	11105423.3	09720032.3 (EP Pub. No 2257571)	Serial Number
10-Мат-2009	10-Mar-2009	10-Mar-2009	10-Mar-2009	10-Mar-2009	10-Mar-2009	Filing Date
Japan	Israel	Israel	India	Hong Kong	European Patent Convention	Country
Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovarus Infections	Title
						Description
None	Response to Office Action due	None	None	None	Power of Attorney	Action Due
	10/23/15				8/3/2015	Deadline

THER-006/N01CA 316188-2082	THER-006/N01AU 316188-2081	THER-004/C03US 316188-2171	THER-004/C02US 316188-2053	THER-004/C01US 316188-2052	THER-004/001US 316188-2050	THER-004/N01MX 316188-2064	THER-004/DOLIP 316188-2054	Cooley Docket No.
37418- 506N01CA	37418- 506N01AU	N/A	37418- 504C02US	37418- 504C01US	37418- 504001US	37418- 504N01MX	37418- 504D01JP	ML Docket No.
PCT	PCT	CON	CON	CON	ORD	PCT	PCT	Type
Pending	Accepted	Pending	Granted	Granted	Granted	Granted	Pending	Status
2743306	2009314091	14/323,537	13/486569 (Patent No. 8.852.594)	13/109632 (Patent No 8,268,309)	12/401585 (Patent No 7,982.012)	MX/a/2010/00988 5 (Patent No 314239)	2013-131336	Serial Number
12-Nov-2009	12-Nov-2009	03-Jul-2014	01-Jun-2012	17-May-201	10-Mar-2009	10-Mar-2009	10-Mar-2009	Filing Date
Canada	Australia	United States of America	United States of America	United States of America	United States of America	Mexico	Japan	Country
Human M2E Peptide Immunogens	Human M2E Peptide Immunogens	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Compositions And Methods For The Therapy And Diagnosis Of Cytomegalovirus Infections	Title			
Encompasses peptide immunogens that are effective and capable of inducing	Influenza M2e peptide immunogens: Human M2e Vaccine Immunogens:	Same disclosure as USSN 12/401585, 13/109632, and 13/486569	Same disclosure as USSN 12/401585 and13/109632	Same disclosure as USSN 12/401585	Same disclosure as other 504 applications (claims encompass 2N9 antibody)			Description
Sequence Listing due	None	Response to Restriction Requirement the	None	None	Моне	Nome	None	Action Due
9/4/2015		8/5/15 (Initial) 12/5/15 (final)						Deadline

THER-008/NOICN 316188-2090 THER-008/NOITH 316188-2092	THER-006/C02US 316188-2183	THER-006/C01US 316188-2080	THER-006/001US 316188-2078	THER-006/D01JP 316188-2168	THER-006/N01JP 316188-2085	THER-006/N01HK 316188-2084	THER-006/N01EP 316188-2083	Cooley Docket No.
37418- 508NOICN 508NOITH	N/A	37418- 506C01US	37418- 506001US	N/A	37418- 506N01JP	37418- 506001HK	37418- 506N01EP	ML Docket No.
PCT	CON	CON	ORD	DIV	PCT	REG	PCT	Туре
Published Pending	Pending	Granted	Granted	Pending	Published	Published	Published	Status
201080027170.9	14/594,461	13/523710 (Patent No. 8,932,597)	12/617243 (Patent No. 8,329,188)	2014-106974	2011-536450	12100695	09752676.8 (EP Pub. No. 2346529)	Serial Number
23-Apr-2010	12-Jan-2015	14-Jun-2012	12-Nov-2009	12-Nov-2009	12-Nov-2009	12-Nov-2009	12-Nov-2009	Filing Date
China (People's Republic) Thailand	United States of America	United States of America	United States of America	Japan	Japan	Hong Kong	European Patent Convention	Country
Granulocyte-Ma crophage Colony-Stimulati ng Factor (GM-CSF) Neutralizing Antibodies Granulocyte-Ma crophage Colony-Stimulati ng Factor (GM-CSF) Neutralizing Antibodies	Human M2E Peptide Immunogens	Human M2E Peptide Immunogens	Human M2E Peptide Immunogens	Human M2E Vaccine Immunogens	Human M2E Vaccine Immunogens	Human M2E Vaccine Immunogens	Human M2E Peptide Immunogens	Title
GM-CSF: Granulocyte-Macrophage Golony-Stanulating Factor (GM-CSF) Neutralizing Antibodies: Encompasses the 1783122 autibody.	V, and Xaa ₅ is D or C.	the sequence S-L-L-T-E (SEQ ID NO: 47), the substitution selected from the group consisting of: Xaa ₁ is A, C, F or K, Xaa ₃ is A, C, F or K, M O, S, T or A, C, F or F, K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or A, C, F or K, M O, S, T or M O, S, T o	amino acid, preferably E; Xaa ₈ is any amino acid not including proline, preferably G or A; Xaa ₁ -Xaa ₂ -Xaa ₃ -Xaa ₄ -Xaa ₅ -is S-L-L-T-E or, a peptide	is any amino acid, preferably C; Xaa ₆ is any amino acid, preferably preferably V or C; Xaa ₇ is any	4-Xaa ₅ -[Xaa ₆] ₅ -[Xaa ₇] ₄] _n , wherein, m, p and q are independently 0 or 1, n is any	the following formula: [Xaa ₀] _m -Xaa ₁ -Xaa ₂ -Xaa ₃ -Xaa -Xaa ₅ -[Xaa ₆] _p -[Xaa ₇] _q -[Xaa ₈ - [Xaa ₀] _m -Xaa ₂ -Xaa ₂ -Xaa ₃ -Xaa	antibodies against influenza A virus to prevent infection by the virus. For example, a peptide immunogen of this invention is represented by	Description
Nome Nome	Response to Restriction Requirement due	None	None	None	None	None	Deadline to Pay Grant fees (and file translations of claims)	Action Due
	7/11/2015 (Initial) 11/11/15 (Final)						11/1/2015	Deadline

THER-012/N01AU 316188-2109	THER-009/C01US 316188-2175	THER-009/N01US 316188-2100	THER-009/D01JP 316188-2172	THER-009/N01EP 316188-2098	THER-009/N01CA 316188-2097	THER-009/N01AU 316188-2096	THER-008/001US 316188-2087	Cooley Docket No.
37418- 512N01AU	N/A	37418- 509N01US	N/A	37418- 509N01EP	37418- 509N01CA	37418- 509N01AU	37418- 508001US	ML Docket No.
PCT	CON	PCT	DIV	PCT	PCT	PCT	ORD	Туре
Pending	Published	Granted	Published	Published	Pending	Pending	Granted	Status
2010282415	14/513973	13/321460 (Patent No. 8,858,948)	2014-139557	10732514.4 (EP Pub. No. 2432803)	2762302	2010249787	12/766444 (Patent No 8.609,101)	Serial Number
12 Aug 2010	14-Oct-2014	20-May-201 0	20-May-201 0	20-May-201 0	20-May-201 0	20-May-201 0	23-Apr-2010	Filing Date
Australia	United States of America	United States of America	Japan	European Patent Convention	Canada	Australia	United States of America	Country
Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Compositions And Methods For The Therapy And Diagnosis Of Influenza	Granulocyte-Ma crophage Colony-Stimulati ng Factor (GM-CSF) Neutralizing Antibodies	Title
Influenza M2e/HA Compositions and Methods for the Therapy and Diagnosis of Influenza: Encompasses M2e antibodies from Theraclone's 509 application				3260, D19, 3362, B11, and 3242, P05. Also includes same epitopes as the 503 application.	3244 110, 3243 107, 3259 121, 3245 019, 3244 1404, 3136 605, 3252 C13, 3255 106, 3420 123, 3139 P23, 3248 P18 3253 P10	Influenza M2e: Compositions and Methods for the Therapy and Diagnosis of Influenza: Encompasses antibodies 8i10, 21B15 23K12, 3241 G23,		Description
Deadline to place application in condition for allowance	None	None	None	Response to Official Action Due	None	Deadline to place application in condition for allowance	None	Action Due
(Initial) (Buttal) 8/11/2016 (Final)				8/20/2015 (initial) 10/20/2015 (final)		11/11/2015 (Initial) 8/11/2016 (Final)		Deadline

THER-012/C01US 316188-2182	THER-012/001US 316188-2107	THER-012/001TW 316188-2106	THER-012/D01JP 316188-2179	THER-012/N01JP 316188-2113	THER-012/NOTHK 316188-2112	THER-012/NOTEP 316188-2111	THER-012/N01CA 316188-2110	Cooley Docket No.
N/A	37418- 512001US	37418- 512001TW	N/A	37418- 512N01IP	37418- 512N01HK	37418- 512N01EP	37418- 512N01CA	ML Docket No.
CON	ORD	ORD	DIV	PCT	REG	PCT	PCT	Туре
Pending	Granted	Published	Pending	Pending	Pending	Published	Pending	Status
14/642194	12/855553 (Patent No. 8.974.788)	99127135	2015-30186	2012-524878	12106995.8	10808769.3 (EP Pub. No. 2464383)	2771105	Serial Number
09-Mar-2015	12-Aug-2010	13-Aug-2010	12 Aug 2010	Filing Date				
United States of America	United States of America	Taiwan	Japan	Јарап	Hong Kong	Europe	Canada	Country
Compositions And Methods For The Therapy And Diagnosis Of Influenza	Title							
						2008/028946)).	in combination with the HA antibodies of Crucell PCT application (International Patent Application PCT/EP2007/059356 (Publication No WO	Description
Response to Notice to File Missing Parts	None	поне	None	None	None	None	Deadline to Request Examination	Action Due
8/19/15 (Next) 10/19/15 (Final)							8/12/2015	Deadline

Cooley Docket No.	ML Docket No.	Туре	Status	Serial Number	Filing Date	Country	Title	Description	Action Due	Deadline
THER-015/N01AU 316188-2119	37418- 515N01AU	PCT	Pending	2011289275	12-Aug-2011	Australia	Anti-Hemaggluti nin Antibody Compositions And Methods Of Use Thereof	Influenza HA: Compositions and methods for TCN-522 (3212_112), TCN-521 (3280_D18), TCN-523 (5248_A17), TCN-563 (5237_B21), TCN-526 (5084_C17), TCN-526	Deadline to place in condition for allowance (initial) Deadline to place in condition for allowance (final)	9/22/2015
THER-015/N01CA 316188-2120	37418- 515N01CA	PCT	Pending	2807664	12-Aug-2011	Canada	Anti-Hemaggluti nin Antibody Compositions And Methods Of Use Thereof	(5086_C06), TCN-528 (5086_C06), TCN-528 (5087_P17), TCN-529 (5297_H01), TCN-530 (5248_H10a), TCN-531 (5091_H13), TCN-532	Deadline to Request Examination	8/12/2016
THER-015/N01EP 316188-2121	37418- 515N01EP	PCT	Published	11817092.7 (EP Pub. No. 2603237)	12-Aug-2011	Europe	Anti-Hemaggluti nin Antibody Compositions And Methods Of Use Thereof	(\$262_H18), TCN-533 (\$256_A17), TCN-534 (\$249_B02), TCN-535 (\$246_P19), TCN-536 (\$095_N01), TCN-537 (3194_D21), TCN-538	None	
THER-015/N01HK 316188-2122	37418- 515N01HK	REG	Pending	13113083.6	12-Aug-2011	Hong Kong	Anti-Hemaggluti nin Antibody Compositions And Methods Of Use Thereof	(3206_O17), TCN-539 (5056_A08), TCN-540 (5060_F05), TCN-541 (5062_M11), TCN-542 (5079_A16), TCN-543 (5081_G23), TCN-544	None	
THER-015/N01JP 316188-2123	37418- 515N01JP	PCT	Pending	2013-524243	12-Aug-2011	Japan	Anti-Hemaggluti nin Antibody Compositions And Methods Of Use Thereof	(5082_A19), TCN-545 (5082_H5), TCN-546 (5089_L08), TCN-547 (5092_F11), TCN-548 (5092_F11), TCN-549 (5092_F04), TCN-559	None	
THER-015/001US 316188-2117	37418- 515001US	ORD	Granted	13/208754 (Patent No. 8,900,590	12-Aug-2011	United States of America	Anti-Hemaggluti nin Antibody Compositions And Methods Of Use Thereof	(5092_104), TCN-530 (5096_F06), TCN-551 (5243_D01), TCN-553 (5249_L23), TCN-553 (5261_C18), TCN-554 (5277_M05), TCN-556 (5246_L16), TCN-556 (5089_K12), TCN-557 (5081_A04), TCN-558 (5248_H10b), TCN-559 (5097_G08), TCN-560 (5084_P10), and TCN-504 (3251_K17).	None	

THER-017/N01EP 316188-2133	THER-017/N01CN 316188-2132	THER-017/N01CA 316188-2131	THER-017/N01BR 316188-2130	THER-017/N01AU 316188-2129	THER-017/001US 316188-2127	THER-015/C01US 316188-2176	Cooley Docket No.
37418- 517N01EP	37418- 517N01CN	37418- 517N01CA	37418- 517N01BR	37418- 517N01AU	37418- 51700IUS	NΑ	ML Docket No.
PCT	РСТ	PCT	PCT	РСТ	ORD	ORD	Туре
Pending	Pending	Pending	Pending	Pending	Published	Pending	Status
12709488 6 (EP Pub. No. 2685968)	201280023182.3	2829968	BR112013023576	2012229188	13/418923	14/557,515	Serial Number
13 Mar 2012	13 Mar 2012	13 Mar 2012	13 Mar 2012	13 Mar 2012	13 Mar 2012	12/02/2014	Filing Date
Europe	China	Canada	Brazil	Australia	United States of America	United States of America	Country
Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Anti-Hemaggluti nin Antibody Compositions And Methods Of Use Thereof	Title
		data for the combination of an anti-M2e antibody and oseltamivir (Tamfu) for treating and preventing influenza infection.	Influenza M2e: This application combines the disclosure of (37418-\$03002US, CIP), with				Description
None	None	Deadline to Request Examination	None	Deadline to Request Examination	Response to Office Action due	Response to Office Action due	Action Due
		3/13/2017		3/13/2017	07/24/2015 (Next) 09/24/2015 (Final)	9/24/2015 (initial) 12/24/2015 (Final)	Deadline

THER-017/001TW 316188-2126	THER-017/N01SG 316188-2140	THER-017/N01NZ 316188-2139	THER-017/N01MX 316188-2138	THER-017/N01KR 316188-2137	THER-017/N01JP 316188-2136	THER-017/N01IL 316188-2134	THER-017/N01EN 316188-2135	Cooley Docket No.
37418- 517001TW	37418- 517:N01SG	37418- 517N01NZ	37418- 517N01MX	37418- 517N01KR	37418- 517N01JP	37418- 517N01IL	37418- 517N01IN	ML Docket No.
ORD	PCT	PCT	PCT	PCT	PCT	PCT	PCT	Туре
Published	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Status
101108672	201306826-7	615337	MX/a/2013/01036 7	10-2013-7026811	2013-558105	228403	8270/CHENP/201 3	Serial Number
13 Mar 2012	13 Mar 2012	13 Mar 2012	13 Mar 2012	13 Mar 2012	13 Mar 2012	13 Mar 2012	13 Mar 2012	Filing Date
Taiwan	Singapore	New Zealand	Mexico	Korea	Japan	India	India	Country
Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Title
								Description
None	Request Slow Track Examination	Deadline to place in condition for allowance (initial) Deadline to place in condition for allowance (final)	None	Deadline to Request Examination	Nome	None	None	Action Due
	3/15/16	10/11/2015		3/13/2017				Deadline

THER-018/N01IN 316188-2151	THER-018/N01HK 316188-2174	THER-018/N01EP 316188-2149	THER-018/N01CN 316188-2148	THER-018/N01CA 316188-2147	THER-018/N01BR 316188-2146	THER-018/N01AU 316188-2145	THER-018/C01US 316188-2184	THER-018/001US 316188-2143	Cooley Docket No.
37418- 518N01IN	N/A	37418- 518N01EP	37418- 518N01CN	37418- 518N01CA	37418- 518N01BR	37418- 518N01AU	N/A	37418- 518001US	ML Docket No.
PCT	REG	PCT	PCT	PCT	PCT	PCT	ORD	ORD	Туре
Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Granted	Status
2722/KOLNP/201 3	14109187.8	12747475.7 (EP Pub. No. 2675478)	201280018154.2	2827301	BR112013020743	2012217867	14/578777	13/372870 (Patent No. 8,916,160)	Serial Number
14 Feb 2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	12/22/2014	14 Feb 2012	Filing Date
India	Hong Kong	Europe	China	Canada	Brazil	Australia	United States of America	United States of America	Country
Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Title			
			(Theraclone HA antibodies).	application combines the disclosure of the 512 family (combination of Theraclone M2e antibodies with Crucell HA antibodies) with the disclosure of the 515 family	Influenza M2e/HA: This				Description
None	None	Response to Search Opinion due	Response to Official Action due	Deadline to Request Examination	None	Deadline to Request Examination	None	None	Action Due
		12/1/15	8/6/15 (Initial) 10/6/15 (Final)	2/14/2017		2/14/2017			Deadline

THER-019/001US 316188-2158	THER-018/001TW 316188-2142	THER-018/N01SG 316188-2156	THER-018/N01NZ 316188-2155	THER-018/N01MX 316188-2154	THER-018/N01KR 316188-2153	THER-018/N01JP 316188-2152	THER-018/N01IL 316188-2150	Cooley Docket No.
37418- 519001US	37418- 518001TW	37418- 518N01SG	37418- 518N01NZ	37418- 518N01MX	37418- 518N01KR	37418- 518N01JP	37418- 518N01IL	ML Docket No.
ORD	ORD	PCT	PCT	РСТ	РСТ	PCT	PCT	Туре
Granted	Published	Pending	Pending	Pending	Pending	Pending	Pending	Status
13/596463 (Patent No. 8,822,651)	101104743	201306112-2	614215	MX/a/2013/00935 7	10-2013-7024393	2013-553646	227947	Serial Number
28-Aug-2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	14 Feb 2012	Filing Date
United States of America	Taiwan	Singapore	New Zealand	Mexico	Korea	Japan	Israel	Country
Human Rhinovirus (HRV) Antibodies	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Influenza	Title
HRV: Compositions, methods of making, method of using and kits including TCN-711 (6893_E11), TCN-716 (6362_E16), TCN-717 (638E_H17), or TCN-722 (638E_H17).								Description
None	None	Rely on granted counterpart & pay issue fee	None	None	Deadline to Request Examination	None	Send art to agent	Action Due
		2/14/2016			2/14/2017		8/2/15	Deadline

THER-022/001WO 316188-2166	THER-022/001US 316188-2169	THER-021/001US 316188-2170 THER-021/001WO 316188-2165	THER-020/001WO 316188-2164	THER-020/001US 316188-2167	THER-019/C01US 316188-2173	Cooley Docket No.
37418- 522001WO	37418- 522001US	37418- 521001US 37418- 521001WO	37418- 520001WO	37418- 520001US	N/A	ML Docket No.
PCT	ORD	ORD	PCT	ORD	NOO	Туре
Pending	Pending	Pending Pending	Pending	Pending	Pending	Status
PCT/US2014/ 035675	14/263305	14/256345 PCT/US2014/ 034634	PCT/US2014/ 034632	14/256352	14/449948	Serial Number
28-Apr-2014	28-Apr-2014	18:Apr-2014	18-Apr-2014	18-Apr-2014	1-Aug-2014	Filing Date
Patent Cooperatio n Treaty	United States of America	United States of America Patent Cooperatio n Treaty	Patent Cooperatio n Treaty	United States of America	United States of America	Country
Human Rhinovirus (HRV) Antibodies	Human Rhinovirus (HRV) Antibodies	Compositions and Methods for the Therapy and Diagnosis of Influenza Compositions and Methods for the Therapy and Diagnosis of Influenza	Compositions and Methods for the Therapy and Diagnosis of Cytomegalovirus	Compositions and Methods for the Therapy and Diagnosis of Cytomegalovirus	Human Rhinovirus (HRV) Antibodies	Title
(6358_H17), or TCN-722 (6385_L22). Application adds additional disclosure with respect to binding and activity of TCN-711 (6893_E11).	HRV: Compositions, methods of making, method of using, and kits including TCN-711 (6893_E11), TCN-716 (6362_F16). TCN-717	hifluenza M2e: This application combines the disclosure of (37418-503002US, CIP), with data for the combination of an anti-M2e antibody and oselamivir (Tamthu) for treating and preventing influenza infection. Application contains additional dosages and dosing regimens compared to 517 family.	2F10, 2M16, 2N9, 3C21, 4P12, 5P9, and 9C16. Further encompasses epitopes of the glycoprotein b (gB) envelope protein of the CMV virus, and specifically, wherein said epitope comprises the antigenic determinant 2 site 1 of gB, gp116. Application contains additional dosages and dosing regimens compared to 504 family.	HCMV: Compositions and Methods for the Therapy and Diagnosis of Cytomegalovirus: Fincompasses antibodies		Description
Deadline to enter national stage	None	Response to Restriction Requirement Deadline to enter national stage	Deadline to enter national stage	Response to Restriction Requirement Due	Response to Restriction Requirement Due	Action Due
11/1/2015		08/08/2015 (Next) 10/8/2015 (Final) 10/22/2015	10/19/2015	8/11/2015 (Next) 11/11/2015 (Final)	09/03/2015 (Final)	Deadline

ı			3ODIES	NEUTRALIZING ANTIE	ICIENCY VIRUS (HIV)-	Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV)-NEUTRALIZING ANTIBODIES	Title:
			05-Aug-2011	61/515,548	Expired	PRO	43831.03.2001 United States of America
I			BODIES	NEUTRALIZING ANTIE	ICIENCY VIRUS (HIV)-	Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV)-NEUTRALIZING ANTIBODIES	Title:
			19-Apr-2011	61/476,978	Expired	PRO	43831.02.2001 United States of America
ı			S OF THE HIV-1 IZING ACTIVITY	MONOCLONAL ANTIBODIES DIRECTED AGAINST TIMERIC FORMS OF THE HIV-I ENVELOPE GLYCOPROTEIN WITH BROAD AND POTENT NEUTRALIZING ACTIVITY	ODIES DIRECTED AGA	Title: MONOCLONAL ANTIBODIES DIRECTED AGAINST TIMERIC FORMS OF THE HIV-I ENVELOPE GLYCOPROTEIN WITH BROAD AND POTENT NEUTRALIZING ACTIVI	Title:
	21-Oct-2015 21-Oct-2016	File Oath/Declaration US-Application Status Check	21-Apr-2015	14/692,483 32	Published TSRI1382Con1IAV0032	CON	43831.01.2013 United States of America
1			3ODIES	NEUTRALIZING ANTIE	ICIENCY VIRUS (HIV)-	Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV)-NEUTRALIZING ANTIBODIES	Title:
			27-Sep-2010	61/386,940	Expired	PRO	43831.01.2001 United States of America
ı			AS OF THE HIV-1 JZING ACTIVITY	MONOCLONAL ANTIBODIES DIRECTED AGAINST TRIMERIC FORMS OF THE HIV-I ENVELOPE GLYCOPROTEIN WITH BROAD AND POTENT NEUTRALIZING ACTIVITY	ODIES DIRECTED AGA	Title: MONOCLONAL ANTIBODIES DIRECTED AGAINST TRIMERIC FORMS OF THE HIV-I ENVELOPE GLYCOPROTEIN WITH BROAD AND POTENT NEUTRALIZING ACTIVITY	Title:
_	09-Dec-2022 09-Dec-2026	Tax 11.5	09-Jun-2015	9,051,362	1382.3/IAV0020P	_	United States of America
. – г	09-Dec-2018	Tax 3.5	17-Mar-2010	12/726,245	Allowed	ORD	43831.00.2013
			LYCANDEPENDENT 7 gp41 ON CLEAVED	BROADLY NEUTRALIZING ANTIBODIES TO HIV THAT DEFINE A GLYCANDEPENDENT EPITOPE PRESENT ONLY ON THE PRE-FUSION CONFORMATION OF gp41 ON CLEAVED TRIMERIC ENVELOPE	ZING ANTIBODIES TO LY ON THE PRE-FUSIC	Title: BROADLY NEUTRALIZING ANTIBODIES TO HIV THAT DEFINE A GLYCANDEPENDENT EPITOPE PRESENT ONLY ON THE PRE-FUSION CONFORMATION OF $gp41$ ON CLEAVED TRIMERIC ENVELOPE	Title:
AT							United States of America
					Unfiled	PRO	43831.00.2002
			BODIES	NEUTRALIZING ANTIE	TCIENCY VIRUS (HIV)-	Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV)-NEUTRALIZING ANTIBODIES	Title:
							United States of America
00			31-Aug-2010	61/378,604	Expired	PRO	43831.00.2001
	Due Date(s)	Next Action(s)		Patent Number		Case Type	Country
_			r Filing Date	Application Number	Status	SubCase	Client Matter/SubCase
	Page I of 4		Patent Status by Client	Pate	ces, Inc.	17, 2015 Client: 43831 Theraclone Sciences, Inc.	Monday, August 17, 2015 Client: 4

REEL: 037146 FRAME: 0841

	Case type Clent Kerence Patent Number Issue Date CIP Published 13/780,776 28-Feb-2013 netica CIP Published 13/780,776 28-Feb-2013 netica PCI Pending 2,809.837 31-Aug-2011 PCT Pending 2,809.837 31-Aug-2011 PCT Pending 2,755.821 17-Mar-2010 1382,3CA/IAV0030P Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV) - NEUTRALIZING ANTIBODIES PCT Pending 2,755.821 17-Mar-2010 1382,3CA/IAV0030P Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV) - NEUTRALIZING ANTIBODIES PCT Pending 2011296065 31-Aug-2011 PCT Pending 2010226668 17-Mar-2010 1382,3AU/IAV0029P Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV) - NEUTRALIZING ANTIBODIES	S-Feb-2013 1-Aug-2011 7-Mar-2010 7-Mar-2010 7-Mar-2010 1-Aug-2011
Status Client Reference Patent Number Patent Number Patent Number Patent Number Patent Number Patent Number 13/780,776 ENCY VIRUS (HIV)-NEUTRALIZING ANTIBODI ENCY VIRUS (HIV)-NEUTRALIZING ANTIBODI Pending 2,755,821 1382.3CA/IAV0030P ENCY VIRUS (HIV) - NEUTRALIZING ANTIBODI Pending 2011296065 Pending Pending 2010226668 1382.3AU/IAV0029P ENCY VIRUS (HIV) -NEUTRALIZING ANTIBODI Pending Pending 1382.3AU/IAV0029P	Application Number eference Patent Number Patent Number Pat	liling Date sue Date S-Feb-2013 I-Aug-2011 I-Aug-2011 I-Aug-2011 I-Aug-2011
plication Number tent Number [780,776] [780,77	plication Number Filing Date tent Number Issue Date [780,776] 28-Feb-2013 ALIZING ANTIBODIES ALIZING ANTIBODIES 55,821 17-Mar-2010 55,821 17-Mar-2010 10226668 17-Mar-2010	iling Date sue Date
	Filing Date Issue Date 28-Feb-2013 28-Feb-2013 28-Feb-2011 31-Aug-2011 31-Aug-2011 17-Mar-2010 17-Mar-2010 17-Mar-2010 17-Mar-2010 17-Mar-2010 17-Mar-2010	liling Date sue Date S-Feb-2013 R-Feb-2011 R-Aug-2011 R-Aug-2011 R-Aug-2011 R-Aug-2011

Monday, August 17, 2015 Client: 43831 Theraclane Sciences, Inc.	heracione Scien	ces, Inc.	Patent	Patent Status by Client		Page 3 of 4
Client Matter/SubCase SubCase Country		Status Case Type Client Reference	Application Number Patent Number	Filing Date Issue Date	Next Action(s)	Due Date(s)
43831.80.2013	PCT	Pending	10722810.8	17-Mar-2010	Annuity due	17-Mar-2016
European Patent Convention		1382.3EP/IAVI0029P				
Title: HUMAN	IMMUNODEFI	CIENCY VIRUS (HIV) -N	Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV) -NEUTRALIZING ANTIBODIES	DIES		
43831.99.2001	ORD	Completed	PCT/US2011/49880	31-Aug-2011		
Patent Cooperation Treaty Title: HUMAN	IMMUNODEFI	CIENCY VIRUS (HIV)-N	Treaty Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV)-NEUTRALIZING ANTIBODIES	DIES		
43831.99.2013	ORD	Completed	PCT/US2010/027695	17-Mar-2010		
Patent Cooperation Treaty		TSR1382.3PCT/IAV0019	9			
Title: HUMAN IMMUNODEFICIENCY VIRUS (HIV) -NEUTRALIZING ANTIBODIES						

Client Matter: Client: 43831 Agent: Attorney: Owner: Country:
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PATENT

REEL: 037146 FRAME: 0844

EXHIBIT C

Trademarks

[See attached]

69933352

Гrademark	Docket Number/Subcase Country Name	Status Class(es)	Serial Number Filing Date	Registration Number/Date
-STAR	37418-401/116	Registered	A0010451	956941
	European Community	42	27-Nov-2007	27-Nov-2007
I-STAR	37418-401/226	Registered	A0010451	956941
	Int'l Registration - Madrid Protocol Only	42	27-Nov-2007	27-Nov-2007
-STAR	37418-401/032	Registered	A0010451	956941
	Japan	42	27-Nov-2007	27-Nov-2007
I-STAR	37418-401/	Registered	77/193531	3,680,336
	United States of America	42	30-May-2007	08-Sep-2009
THERACLONE SCIENCES	37418-404/004	Registered	1320239	1320239
	Australia	5, 42	11-Sep-2009	11-Sep-2009
THERACLONE SCIENCES	37418-404/008	Registered	1,451,308	TMA891,074
	Canada	5, 42	10-Sep-2009	27-Nov-2014
THERACLONE SCIENCES	37418-404/010	Registered	7694951	7694951
	China (People's Republic)	5	14-Sep-2009	07-Dec-2010
THERACLONE SCIENCES	37418-404/010A	Registered	7694952	7694952
	China (People's Republic)	42	14-Sep-2009	07-Jan-2011
THERACLONE SCIENCES	37418-404/116	Registered	8542888	8542888
	European Community	5, 42	11-Sep-2009	08-Mar-2010
THERACLONE SCIENCES	37418-404/030	Registered	1861507	1861507
	India	5, 42	11-Sep-2009	11-Sep-2009
THERACLONE SCIENCES	37418-404/032	Registered	2009-69788	5345566
	Japan		11-Sep-2009	13-Aug-2010
THERACLONE SCIENCES	37418-404/034	Registered	45-2009-0003362	45-0032842
	Korea, Republic of	5, 42	14-Sep-2009	03-Nov-2010
THERACLONE SCIENCES	37418-404/046	Registered	812579	812579
	New Zealand	5, 42	11-Sep-2009	11-Mar-2010
THERACLONE SCIENCES	37418-404/009	Registered	59963/2009	601,529
	Switzerland	5, 42	11-Sep-2009	11-Jun-2010
THERACLONE SCIENCES	37418-404/066	Registered	098040107	1418226
	Taiwan	5, 42	11-Sep-2009	30-Jun-2010

Monday, August 17, 2015	Trac	lemark List		Page:
Trademark	Docket Number/Subcase Country Name	Status Class(es)	Serial Number Filing Date	Registration Number/Date
THERACLONE SCIENCES	37418-404/	Registered	77/690467	4,388,327
	United States of America	5	13-Mar-2009	20-Aug-2013
THERACLONE SCIENCES	37418-404A/	Registered	77/981342	3,952,304
	United States of America	42	13-Mar-2009	26-Apr-2011

Monday, August 17, 20	15	Report Selec	ction	Record Count 17
by Traby Corby Clieby Ow	untry ent	Report Format Concise Comprehensive	Goods Print Do Not Print	Remarks Print Do Not Print
Date Range	Preview before printi	○ Registration ○ Ne	xt Renewal	◯ Last Update
Client: 3 Country: Area:	7418		Active Inactive All	Status(es):
Trademark: Owner:				

EXHIBIT D

Mask Works

None.

69933352

RECORDED: 11/19/2015