

TRADEMARK ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
Marina Biotech, Inc.		02/10/2012	CORPORATION: DELAWARE
Cequent Pharmaceuticals, Inc.		02/10/2012	CORPORATION: DELAWARE
MDRNA RESEARCH, INC.		02/10/2012	CORPORATION: DELAWARE

RECEIVING PARTY DATA

Name:	Genesis Capital Management, LLC, as agent
Street Address:	332 Pine Street
City:	San Francisco
State/Country:	CALIFORNIA
Postal Code:	94104
Entity Type:	LIMITED LIABILITY COMPANY: DELAWARE

PROPERTY NUMBERS Total: 8

Property Type	Number	Word Mark
Serial Number:	77167387	MDRNA
Serial Number:	77300471	MDRNA
Serial Number:	77300487	MDRNA
Serial Number:	77300514	MDRNA
Serial Number:	77300531	
Serial Number:	77210800	SMARTICLES
Serial Number:	85301656	MARINA BIOTECH
Serial Number:	85353617	MARINA BIOTECH

CORRESPONDENCE DATA

Fax Number: (212)798-6937
 Phone: 2123260138
 Email: jbraibanti@pryorcashman.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

TRADEMARK

via US Mail.

Correspondent Name: Jill Braibanti, Pryor Cashman LLP
Address Line 1: 7 Times Square
Address Line 4: New York, NEW YORK 10003

NAME OF SUBMITTER:	Andrew S. Langsam
Signature:	/s/ Andrew S. Langsam
Date:	02/15/2012

Total Attachments: 57

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This **INTELLECTUAL PROPERTY SECURITY AGREEMENT** (this "Agreement"), dated as of February 10, 2012, is made by MARINA BIOTECH, INC., a Delaware corporation ("MRNA"), Cequent Pharmaceuticals, Inc., a Delaware corporation ("CPI"), and MDRNA RESEARCH, INC., a Delaware corporation ("Research" and, collectively with MRNA and CPI, "Grantors" and each, individually, "Grantor"), in favor of Genesis Capital Management, LLC, as agent (in such capacity, together with its successors and permitted assigns, the "Agent") for the Purchasers (as defined in the Security Agreement referred to below);

WITNESSETH:

WHEREAS, pursuant to that certain Note and Warrant Purchase Agreement, dated as of even date herewith (as the same may be amended, restated, replaced, supplemented or otherwise modified from time to time, the "Purchase Agreement"), among Grantors and the Purchasers from time to time party thereto (the "Purchasers"; the Agent and Purchasers being collectively referred to as the "Secured Parties"), the Purchasers have severally agreed to make extensions of credit to the Grantors upon the terms and subject to the conditions set forth therein; and

WHEREAS, in order to induce the Purchasers to enter into the Purchase Agreement and other Transaction Documents and to induce the Purchasers to purchase the Notes as provided for in the Purchase Agreement, Grantors have agreed to pledge the Collateral to Agent, on behalf of itself and the Purchasers in accordance herewith;

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, and to induce the Purchasers to enter into the Purchase Agreement and to induce the Purchasers to make their respective purchases of the Notes issued by the Grantors thereunder, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

Section 1. Defined Terms. Capitalized terms used herein without definition are used as defined in the Security Agreement (the "Security Agreement") dated as of even date herewith among the Agent, the Purchasers and the Grantors.

Section 2. Grant of Security Interest in Intellectual Property Collateral. (A) Each Grantor, as collateral security for the prompt and complete payment and performance when due (whether at stated maturity, by acceleration or otherwise) of the Obligations hereby mortgages, pledges, assigns, grants and hypothecates to the Agent for the benefit of the Purchasers, and grants to the Agent for the benefit of the Purchasers a Lien on and security interest in, all of its right, title and interest in, to and under the following Collateral of such Grantor whether now owned or hereafter acquired or arising and wherever located (the "Intellectual Property Collateral"):

(a) all of its copyrights and rights under any written agreement granting any right to use copyrights, including, without limitation, those referred to on Schedule 1 hereto, together with all renewals, reversions and extensions of the foregoing;

(b) all of its patents and rights under any written agreement granting any right to use patents, including, without limitation, those referred to on Schedule 1 hereto, together with all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing;

(c) all of its trademarks and rights under any written agreement granting any right to use trademarks, including, without limitation, those referred to on Schedule 1 hereto, together with all renewals, reissues, continuations and extensions of the foregoing;

(d) all goodwill of the business connected with the use of, and symbolized by, each such trademark; and

(e) all income, royalties, proceeds and liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof.

(B) This Intellectual Property Security Agreement and the security interests created hereby secure the payment and performance of the Secured Obligations, whether now existing or arising hereafter. Without limiting the generality of the foregoing, this Intellectual Property Security Agreement secures the payment of all amounts which constitute part of the Secured Obligations and would be owed by Grantors, or any of them, to Agent or the Purchasers, whether or not they are unenforceable or not allowable due to the existence of an Insolvency Proceeding involving any Grantor.

Section 3. Purchase Agreement & Security Agreement. The security interest granted pursuant to this Intellectual Property Security Agreement is granted in conjunction with, and in no way limiting, the security interest granted to the Agent pursuant to the Security Agreement, and each Grantor hereby acknowledges and agrees that the rights and remedies of the Agent with respect to the security interest in the Intellectual Property Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

Section 4. Authorization to Supplement. If any Grantor shall obtain rights to any new patentable inventions or become entitled to the benefit of any patent application or patent for any reissue, division, or continuation, of any patent, the provisions of this Intellectual Property Security Agreement shall automatically apply thereto. Grantors shall give prompt (and in any event within fifteen (15) Business Days) notice in writing to Agent with respect to any such new patent rights. Without limiting Grantors' obligations under this Section 4, Grantors hereby authorize Agent on behalf of the Secured Parties unilaterally to modify this Agreement by amending Schedule I to include any such new patent rights of Grantors. Notwithstanding the foregoing, no failure to so modify this Intellectual Property Security Agreement or

amend Schedule I shall in any way affect, invalidate or detract from Agent's and the Secured Parties' continuing Security Interest in all Collateral, whether or not listed on Schedule I.

Section 5. Grantor Remains Liable. Grantors hereby agree that, anything herein to the contrary notwithstanding, Grantors shall retain full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their Intellectual Property subject to a security interest hereunder.

Section 6. Counterparts. This Intellectual Property Security Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

Section 7. Governing Law. This Intellectual Property Security Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the law of the State of New York.

IN WITNESS WHEREOF, each Grantor has caused this Intellectual Property Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

GRANTORS:

MARINA BIOTECH, INC., a Delaware corporation

MDRNA RESEARCH, INC., a Delaware corporation

By:

By:

Name:

Name:

Title:

Title:

CEQUENT PHARMACEUTICALS, INC., a Delaware corporation

By:

Name:

Title:

ACCEPTED AND AGREED
as of the date first above written:

GENESIS CAPITAL MANAGEMENT, LLC, As Agent

By:

[Signature]
Name: *Shawn Rhynes*
Title: *Managing Director*

INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

IN WITNESS WHEREOF, each Grantor has caused this Intellectual Property Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

GRANTORS:

MARINA BIOTECH, INC., a Delaware corporation

By:

Name: J. MICHAEL FRENCH

Title: PRESIDENT & CEO

MDRNA RESEARCH, INC., a Delaware corporation

By:

Name: J. MICHAEL FRENCH

Title: PRESIDENT & CEO

CEQUENT PHARMACEUTICALS, INC., a Delaware corporation

By:

Name: J. MICHAEL FRENCH

Title: PRESIDENT & CEO

ACCEPTED AND AGREED
as of the date first above written:

GENESIS CAPITAL MANAGEMENT, LLC, As Agent

By: _____

Name:

Title:

INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

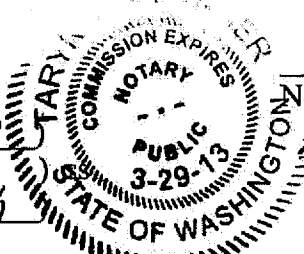
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Acknowledgment of Grantors

STATE OF Washington
COUNTY OF Snohomish) SS

On this 8th day of February, 2012, before me personally appeared J. Michael French, proved to me on the basis of satisfactory evidence to be the person who executed the foregoing instrument on behalf of MARINA BIOTECH, INC., who being by me duly sworn did depose and say that he is an authorized officer of said corporation, that the said instrument was signed on behalf of said corporation as authorized by its Board of Directors and that he acknowledged said instrument to be the free act and deed of said corporation.

STATE OF Washington
COUNTY OF Snohomish)
Taryn Joy Frazier
Notary Public (Taryn Joy Frazier)
My appointment expires 3/29/13



On this 8th day of February, 2012, before me personally appeared J. Michael French, proved to me on the basis of satisfactory evidence to be the person who executed the foregoing instrument on behalf of CEQUENT PHARMACEUTICALS, INC., who being by me duly sworn did depose and say that he is an authorized officer of said corporation, that the said instrument was signed on behalf of said corporation as authorized by its Board of Directors and that he acknowledged said instrument to be the free act and deed of said corporation.

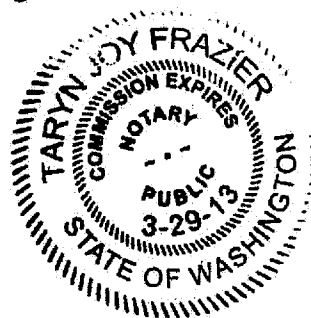
STATE OF Washington
COUNTY OF Snohomish)
Taryn Joy Frazier
Notary Public (Taryn Joy Frazier)
My appointment expires 3/29/13



STATE OF Washington
COUNTY OF Snohomish) SS

On this 8th day of February, 2012, before me personally appeared J. Michael French, proved to me on the basis of satisfactory evidence to be the person who executed the foregoing instrument on behalf of MDRNA RESEARCH, INC., who being by me duly sworn did depose and say that he is an authorized officer of said corporation, that the said instrument was signed on behalf of said corporation as authorized by its Board of Directors and that he acknowledged said instrument to be the free act and deed of said corporation.

Taryn Joy Frazier
Notary Public (Taryn Joy Frazier)
My appointment expires 3/29/13
ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE



Schedule I
to
Intellectual Property Security Agreement

REGISTERED COPYRIGHTS

None.

COPYRIGHT APPLICATIONS

None.


Trademark Registrations/Applications

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
T07-01US	MDRNA (Standard Characters)	42	US	77/167,387	4/27/2007			Allowed	MARINA BIOTECH, INC.
T07-01CA	MDRNA (Standard Characters)	Service	Canada	1368460	10/22/2007			Published	MARINA BIOTECH, INC.
T07-01IN	MDRNA (Standard Characters)	42	India	1614235	10/23/2007			Registered	MARINA BIOTECH, INC.
T07-01IL	MDRNA (Standard Characters)	42	Israel	205091	10/28/2007	205091	9/7/2009	Registered	MARINA BIOTECH, INC.
T07-01MX	MDRNA (Standard Characters)	42	Mexico	891845	10/25/2007	1027712	2/28/2008	Registered	MARINA BIOTECH, INC.
T07-01NZ	MDRNA (Standard Characters)	42	New Zealand	778309	10/24/2007	778309	4/24/2008	Registered (Deemed to be Protected as of 4/27/07)	MARINA BIOTECH, INC.


ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
T07-01MP	MDRNA (Standard Characters)	42	Madrid Protocol	A0010074	10/24/2007	945605	10/24/2007	Registered	MARINA BIOTECH, INC.
			Australia (AU)			1217246	10/24/2007	Protected	MARINA BIOTECH, INC.
			European Community (EM)					Protected	MARINA BIOTECH, INC.
			Iceland (IS)					Presumed to be protected under 18 month time limit.	MARINA BIOTECH, INC.
			Japan (JP)					Protected	MARINA BIOTECH, INC.
			Norway (NO)					Protected	MARINA BIOTECH, INC.
			Rep. of Korea (KR)					Protected	MARINA BIOTECH, INC.

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
			<i>Russia (RU)</i>					Presumed to be protected under 18 month time limit.	MARINA BIOTECH, INC.
			<i>Switzerland (CH)</i>					Presumed to be protected under 18 month time limit.	MARINA BIOTECH, INC.
			<i>Ukraine (UA)</i>					Presumed to be protected under 18 month time limit.	MARINA BIOTECH, INC.
T07-11US 	MDRna (stylized w/o color claim)	42	US	77/300,471	10/10/2007			Allowed	MARINA BIOTECH, INC.


ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
T07-12US 	MDR <small>NA</small> (stylized in design w/o color claim), polymer and circle design	42	US	77/300,487	10/10/2007			Allowed	MARINA BIOTECH, INC.
T07-12IL	MDR <small>NA</small> (stylized in design w/o color claim), polymer and circle design	42	Israel	210204	4/6/2008			Published	MARINA BIOTECH, INC.
T07-12IN	MDR <small>NA</small> (stylized in design w/o color claim), polymer and circle design	42	India	1673113	4/7/2008			Registered	MARINA BIOTECH, INC.
T07-12MX	MDR <small>NA</small> (stylized in design w/o color claim), polymer and circle design	42	Mexico	924801	4/4/2008	1050522	7/18/2008	Registered	MARINA BIOTECH, INC.
T07-12CA	MDR <small>NA</small> (stylized in design w/o color claim), polymer and circle design	Service	Canada	1390066	4/4/2008			Allowed	MARINA BIOTECH, INC.

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership	
T07-12NZ	MDRNA (stylized in design w/o color claim), polymer and circle design	42	New Zealand	787232	4/8/2008	787232	10/9/2008	Registered	MARINA BIOTECH, INC.	
T07-12CTM	MDRNA (stylized in design w/o color claim), polymer and circle design	42	European Community	6857461	4/9/2008	6857461	1/7/2009	Registered	MARINA BIOTECH, INC.	
T07-12MP	MDRNA (stylized in design w/o color claim), polymer and circle design	42	Madrid Protocol	A0012042	4/10/2008	964650	4/10/2008	Registered	MARINA BIOTECH, INC.	
			Australia (AU)				1248260	4/10/2008	Protected	MARINA BIOTECH, INC.
			Iceland (IS)						Presumed to be protected under 18 month time limit.	MARINA BIOTECH, INC.
			Japan (JP)						Protected	MARINA BIOTECH, INC.
			Norway (NO)					Protected	MARINA BIOTECH, INC.	

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
			Rep. of Korea (KR)					Protected	MARINA BIOTECH, INC.
			Russia (RU)					Presumed to be protected under 18 month time limit.	MARINA BIOTECH, INC.
			Switzerland (CH)					Presumed to be protected under 18 month time limit.	MARINA BIOTECH, INC.
			Ukraine (UA)					Presumed to be protected under 18 month time limit.	MARINA BIOTECH, INC.
T07-13US 	MDRNA (stylized in design w/ color claim), polymer and circle design	42	US	77/300,514	10/10/2007			Allowed	MARINA BIOTECH, INC.

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
T07-14US	(design w/o color claim) polymer design	42	US	77/300,531	10/10/2007			Allowed	MARINA BIOTECH, INC.
306-T08-01US	SMARTICLES (word)	003, 004, 005, 042, 045	US	77/210,800	6/20/2007	3713727	11/24/2009	Registered	Marina Biotech, Inc.


ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
306-T08-01CTM	SMARTICLES (word)	001, 004, 005, 042, 045	CTM	6003032	6/14/2007	6003032	1/9/2009	Registered	Marina Biotech, Inc.
306-T09-01US	MARINA BIOTECH (word)	042,	US	85/301,656	4/21/2011	4,066,745	12/6/2011	Registered	Marina Biotech, Inc.
306-T09-01CA	MARINA BIOTECH (word)		Canada	1548036	10/17/2011			Pending	Marina Biotech, Inc.

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
306-T09-01MP	MARINA BIOTECH (word)	042,	MP	A0026816	10/21/2011	1,097,394	10/21/2011	Registered	Marina Biotech, Inc.
			Australia					Pending	
			China					Pending	
			European Community					Pending	
			Israel					Pending	
			Japan					Pending	
			Singapore					Pending	
			Korea					Pending	
								Pending	

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Docket No.	Mark	IC	Country	Appl. No.	Filing Date	Reg. No.	Reg. Date	Status	Ownership
306-T09-02US	MARINA BIOTECH (black & white in design) 	042,	US	85/353,617	6/22/2011	4,067,313	12/6/2011	Registered	Marina Biotech, Inc.

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

Patents and Patent Applications

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSOR	LICENSEE	SUBLICENSEE OR LICENSEE OF MDRNA
12/18/1998	U.S. 6,506,559	1/14/2003	GENETIC INHIBITION BY DOUBLE-STRANDED RNA	N/A	CARNEGIE INSTITUTION OF WASHINGTON	CARNEGIE INSTITUTION OF WASHINGTON	MARINA BIOTECH, INC.	N/A
10/30/2002	U.S. 7,538,095	5/26/2009	GENETIC INHIBITION BY DOUBLE-STRANDED RNA	N/A	CARNEGIE INSTITUTION OF WASHINGTON	CARNEGIE INSTITUTION OF WASHINGTON	MARINA BIOTECH, INC.	N/A
7/13/2007	U.S. 11/826,385	N/A	GENETIC INHIBITION BY DOUBLE-STRANDED RNA	N/A	CARNEGIE INSTITUTION OF WASHINGTON	CARNEGIE INSTITUTION OF WASHINGTON	MARINA BIOTECH, INC.	N/A
10/01/2007	U.S. 11/905,449	N/A	GENETIC INHIBITION BY DOUBLE-STRANDED RNA	N/A	CARNEGIE INSTITUTION OF WASHINGTON	CARNEGIE INSTITUTION OF WASHINGTON	MARINA BIOTECH, INC.	N/A

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSOR	LICENSEE	SUBLICENSEE OR LICENSEE OF MDRNA
9/28/2007	U.S. 11,905,368	N/A	GENETIC INHIBITION BY DOUBLE-STRANDED RNA	N/A	CARNEGIE INSTITUTION OF WASHINGTON	CARNEGIE INSTITUTION OF WASHINGTON	MARINA BIOTECH, INC.	N/A
10/30/2002	U.S. 7,560,438	7/14/2009	GENETIC INHIBITION BY DOUBLE-STRANDED RNA	N/A	CARNEGIE INSTITUTION OF WASHINGTON	CARNEGIE INSTITUTION OF WASHINGTON	MARINA BIOTECH, INC.	N/A
10/30/2002	U.S. 7,622,633	11/24/2009	GENETIC INHIBITION BY DOUBLE-STRANDED RNA	N/A	CARNEGIE INSTITUTION OF WASHINGTON	CARNEGIE INSTITUTION OF WASHINGTON	MARINA BIOTECH, INC.	N/A
12/21/1998	PCT/US1998/27233	N/A	GENETIC INHIBITION BY DOUBLE-STRANDED RNA	AU, CA, JP, EP	CARNEGIE INSTITUTION OF WASHINGTON	CARNEGIE INSTITUTION OF WASHINGTON	MARINA BIOTECH, INC.	N/A
3/28/2002	U.S. 7,112,242	9/26/2006	PEPTIDES FOR GENE DELIVERY	N/A	REAGENTS OF THE UNIV. OF MICHIGAN	REAGENTS OF THE UNIV. OF MICHIGAN	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSOR	LICENSEE	SUBLICENSEE OR LICENSEE OF MDRNA
3/30/1998	U.S. 6,387,700	5/14/2002	CATIONIC PEPTIDES, CYS-TRP-(LYS) _n , FOR GENE DELIVERY	N/A	REAGENTS OF THE UNIV. OF MICHIGAN	REAGENTS OF THE UNIV. OF MICHIGAN	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
7/13/2000	U.S. 6,770,740	8/3/2004	CROSSLINKED DNA CONDENSATE COMPOSITIONS AND GENE DELIVERY METHODS	N/A	REAGENTS OF THE UNIV. OF MICHIGAN	REAGENTS OF THE UNIV. OF MICHIGAN	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
6/15/2007	U.S. 60/934,751	N/A	BACTERIA MEDIATED GENE SILENCING	N/A	BETH ISRAEL DEACONESS MEDICAL CENTER	BETH ISRAEL DEACONESS MEDICAL CENTER	MARINA BIOTECH, INC.	VITHERA LABORATORIES
1/04/2008	U.S. 61/010,028	N/A	BACTERIA MEDIATED GENE SILENCING	N/A	BETH ISRAEL DEACONESS MEDICAL CENTER	BETH ISRAEL DEACONESS MEDICAL CENTER	MARINA BIOTECH, INC.	VITHERA LABORATORIES
6/13/2008	PCT/US2008/007384	N/A	BACTERIA MEDIATED TNF- α GENE SILENCING	EP, HK	BETH ISRAEL DEACONESS MEDICAL CENTER	BETH ISRAEL DEACONESS MEDICAL CENTER	MARINA BIOTECH, INC.	VITHERA LABORATORIES

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSOR	LICENSEE	SUBLICENSEE OR LICENSEE OF MDRNA
6/7/2010	U.S. 12/602,883	N/A	BACTERIA MEDIATED TNF- α GENE SILENCING	N/A	BETH ISRAEL DEACONESS MEDICAL CENTER	BETH ISRAEL DEACONESS MEDICAL CENTER	MARINA BIOTECH, INC.	VITHERA LABORATORIES
12/17/2004	U.S. 60/637,277	N/A	COMPOSITIONS FOR BACTERIAL MEDIATED GENE SILENCING AND METHODS OF USING SAME	N/A	BETH ISRAEL DEACONESS MEDICAL CENTER	BETH ISRAEL DEACONESS MEDICAL CENTER	MARINA BIOTECH, INC.	VITHERA LABORATORIES
02/08/2005	U.S. 60/651,238	N/A	COMPOSITIONS FOR BACTERIAL MEDIATED GENE SILENCING AND METHODS OF USING SAME	N/A	BETH ISRAEL DEACONESS MEDICAL CENTER	BETH ISRAEL DEACONESS MEDICAL CENTER	MARINA BIOTECH, INC.	VITHERA LABORATORIES
12/16/2005	PCT/US2005/45513	N/A	COMPOSITIONS FOR BACTERIAL MEDIATED GENE SILENCING AND METHODS OF USING SAME	AU, CA, EP, HK, JP, KR	BETH ISRAEL DEACONESS MEDICAL CENTER	BETH ISRAEL DEACONESS MEDICAL CENTER	MARINA BIOTECH, INC.	VITHERA LABORATORIES
8/2/2011	U.S. 13/196,436	N/A	COMPOSITIONS FOR BACTERIAL MEDIATED GENE SILENCING AND METHODS OF USING SAME	N/A	BETH ISRAEL DEACONESS MEDICAL CENTER	BETH ISRAEL DEACONESS MEDICAL CENTER	MARINA BIOTECH, INC.	VITHERA LABORATORIES

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
4/30/2004	PRC 200480018784	9/8/2009	CLAUDINS' UNDEREXPRESSION AS MARKERS OF TUMOR METASTASIS	N/A	MARINA BIOTECH, INC.	N/A
8/25/2003	60/497,740	N/A	NANOPARTICLES FOR DELIVERY OF NUCLEIC ACIDS AND STABLE DOUBLE-STRANDED RNA	N/A	MARINA BIOTECH, INC.	N/A
10/29/2003	60/515,533	N/A	PHAGE DISPLAY TRP CAGE LIGANDS	N/A	MARINA BIOTECH, INC.	N/A
12/12/2007	U.S. 8,063,178	11/22/2011	PHAGE DISPLAYED TRP CAGE LIGANDS	N/A	MARINA BIOTECH, INC.	N/A
10/29/2004	U.S. 7,329,725	2/12/2008	PHAGE DISPLAYED TRP CAGE LIGANDS	N/A	MARINA BIOTECH, INC.	N/A
12/15/2003	U.S. 60/529,682	N/A	METHODS FOR OPENING TIGHT JUNCTIONS	N/A	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
01/18/2007	U.S. 7,696,343	4/13/2010	METHODS FOR OPENING TIGHT JUNCTIONS	N/A	MARINA BIOTECH, INC.	N/A
4/20/2004	U.S. 60/564,543	N/A	CONJUGATION OF A CHOLESTEROL MOIETY TO DOUBLE-STRANDED RNA OR A DOUBLE-STRANDED HYBRID NUCLEIC ACID	N/A	MARINA BIOTECH, INC.	N/A
8/30/2010	U.S. 12/870,989	N/A	METHODS AND COMPOSITIONS FOR ENHANCING DELIVERY OF DOUBLE-STRANDED RNA OR A DOUBLE-STRANDED HYBRID NUCLEIC ACID TO REGULATE GENE EXPRESSION IN MAMMALIAN CELLS	N/A	MARINA BIOTECH, INC.	N/A
4/15/2005	PCT/US2005/012653	N/A	METHODS AND COMPOSITIONS FOR ENHANCING DELIVERY OF DOUBLE-STRANDED RNA OR A DOUBLE-STRANDED HYBRID NUCLEIC ACID TO REGULATE GENE EXPRESSION IN MAMMALIAN CELLS	CA, EP, JP, MX, HK	MARINA BIOTECH, INC.	N/A
5/4/2004	U.S. 60/568,027	N/A	HISTONES COMPLEXED OR COVALENTLY BONDED TO DOUBLE-STRANDED RNA OR TO AN RNA/DNA HYBRID	N/A	MARINA BIOTECH, INC.	N/A

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
5/4/2005	PCT/US2005/015574	N/A	COMPOSITIONS AND METHODS FOR ENHANCING DELIVERY OF NUCLEIC ACIDS INTO CELLS AND FOR MODIFYING EXPRESSION OF TARGET GENES IN CELLS	CA, EP, JP, MX	MARINA BIOTECH, INC.	N/A
9/8/2008	U.S. 12/206,165	N/A	COMPOSITIONS AND METHODS FOR ENHANCING DELIVERY OF NUCLEIC ACIDS INTO CELLS AND FOR MODIFYING EXPRESSION OF TARGET GENES IN CELLS	N/A	MARINA BIOTECH, INC.	N/A
5/12/2004	U.S. 60/570,513	N/A	POLYPEPTIDES COMPLEXED OR COVALENTLY BONDED TO DOUBLE-STRANDED RNA OR RNA/DNA HYBRID	N/A	MARINA BIOTECH, INC.	N/A
5/12/2004	U.S. 60/570,512	N/A	POLYPEPTIDES COMPLEXED OR LINKED TO DOUBLE-STRANDED RNA OR TO AN RNA/DNA HYBRID WITH A CATIONIC LIPID	N/A	MARINA BIOTECH, INC.	N/A
9/27/2004	U.S. 60/613,416	N/A	THE USE OF RNA INTERFERENCE TO TREAT RHEUMATOID ARTHRITIS	N/A	MARINA BIOTECH, INC.	N/A
4/1/2005	U.S. 60/667,833	N/A	COMPOSITIONS AND METHODS FOR RNA INTERFERENCE TO TREAT RHEUMATOID ARTHRITIS	N/A	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
9/27/2005	PCT/US2005/035259	N/A	METHOD OF TREATING AN INFLAMMATORY DISEASE BY DOUBLE STRANDED RIBONUCLEIC ACID	AU, CA, CN, EP, HK, IN, JP, KR, MX, NZ, SG	MARINA BIOTECH, INC.	N/A
3/27/2007	U.S. 11/576,139	N/A	METHOD OF TREATING AN INFLAMMATORY DISEASE BY DOUBLE STRANDED RIBONUCLEIC ACID	N/A	MARINA BIOTECH, INC.	N/A
2/25/2005	U.S. 60/656,572	N/A	CONJUGATION OR COMPLEXATION OF A PROTEIN TRANSDUCTION DOMAIN AND FUSOGENIC POLYPEPTIDE TO A SMALL INTERFERING NUCLEIC ACID FOR USE IN RNA INTERFERENCE	N/A	MARINA BIOTECH, INC.	N/A
10/14/2005	U.S. 60/727,216	N/A	PEPTIDE-MEDIATED SIRNA UPTAKE INTO CELLS	N/A	MARINA BIOTECH, INC.	N/A
11/4/2005	U.S. 60/733,664	N/A	PEPTIDE MEDIATED CELLULAR UPTAKE OF DOUBLE STRANDED RNA	N/A	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
2/17/2006	U.S. 60/774,496	N/A	PHAGE DISPLAYED CELL BINDING PEPTIDES	N/A	MARINA BIOTECH, INC.	N/A
8/29/2006	U.S. 60/823,894	N/A	PHAGE DISPLAYED CELL BINDING PEPTIDES	N/A	MARINA BIOTECH, INC.	N/A
1/26/2007	U.S. 7,704,953	4/27/2010	PHAGE DISPLAYED CELL BINDING PEPTIDES	N/A	MARINA BIOTECH, INC.	N/A
2/5/2010	U.S. 7,772,189	8/10/2010	PHAGE DISPLAYED CELL BINDING PEPTIDES	N/A	MARINA BIOTECH, INC.	N/A
9/15/2006	U.S. 60/825,878	N/A	COMPOUNDS AND METHODS FOR PEPTIDE RIBONUCLEIC ACID CONDENSATE PARTICLES FOR RNA THERAPEUTICS	N/A	MARINA BIOTECH, INC.	N/A
10/13/2006	PCT/US2006/040174	N/A	COMPOUNDS AND METHODS FOR PEPTIDE RIBONUCLEIC ACID CONDENSATE PARTICLES FOR RNA THERAPEUTICS	AU, CA, CN, EP, HK, IN, JP, KR, MX, NZ, SG	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
10/13/2006	U.S. 12/445,575	N/A	COMPOUNDS AND METHODS FOR PEPTIDE RIBONUCLEIC ACID CONDENSATE PARTICLES FOR RNA THERAPEUTICS	N/A	MARINA BIOTECH, INC.	N/A
10/18/2006	U.S. 60/862,027	N/A	COMPOSITIONS AND METHODS EMPLOYING GAPPED OR NICKED SIRNA MOLECULES	N/A	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.
4/5/2007	U.S. 60/910,393	N/A	COMPOSITIONS AND METHODS OF USING GAPPED OR NICKED DOUBLE STRANDED NUCLEIC ACID MOLECULES	N/A	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.
8/10/2007	U.S. 60/955,317	N/A	COMPOSITIONS AND METHODS OF USING DOUBLE-STRANDED NUCLEIC ACID MOLECULES CONTAINING ONE OR MORE GAP OR NICK	N/A	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.
8/30/2007	U.S. 60/969,136	N/A	COMPOSITIONS AND METHODS OF USING DOUBLE-STRANDED NUCLEIC ACID MOLECULES CONTAINING ONE OR MORE GAP OR NICK	N/A	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.
10/18/2007	PCT/US2007/081836	N/A	NICKED OR GAPPED NUCLEIC ACID MOLECULES AND USES THEREOF	AU, CA, EP, HK, IN, JP	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
10/18/2007	U.S. 12/445,868	N/A	NICKED OR GAPPED NUCLEIC ACID MOLECULES AND USES THEREOF	N/A	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.
5/4/2007	U.S. 60/916,131	N/A	AMINO ACID LIPID COMPOSITIONS AND METHODS FOR DELIVERING RNA THERAPEUTICS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
6/29/2007	U.S. 60/947,282	N/A	AMINO ACID LIPID COMPOSITIONS AND METHODS FOR DELIVERING RNA THERAPEUTICS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
8/2/2007	U.S. 60/953,667	N/A	AMINO ACID LIPID COMPOSITIONS AND METHODS FOR DELIVERING RNA THERAPEUTICS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
9/14/2007	U.S. 60/972,653	N/A	AMINO ACID LIPIDS AND USES FOR RNA THERAPEUTICS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
5/2/2008	PCT/US2008/062526	N/A	AMINO ACID LIPIDS AND USES THEREOF	AU, CA, CN, EP, HK, IL, IN, JP, NZ	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH; DEBIOPHARM

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
5/2/2008	U.S. 7,939,505	5/10/2011	AMINO ACID LIPIDS AND USES THEREOF	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH; DEBIOPHARM
3/30/2011	13/076,158	N/A	AMINO ACID LIPIDS AND USES THEREOF	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH; DEBIOPHARM
9/14/2007	U.S. 60/972,590	N/A	EMULSION COMPOSITIONS FOR INTERFERING RNA AND USES THEREOF	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
1/22/2008	U.S. 61/022,571	N/A	DISPERSION COMPOSITIONS FOR INTERFERING RNA AND USES THEREOF	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
10/2/2007	U.S. 60/976,894	N/A	LIPOPEPTIDES FOR DELIVERY OF INTERFERING RNA AGENTS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
10/2/2008	PCT/US2008/078627	N/A	LIPOPEPTIDES FOR DELIVERY OF NUCLEIC ACIDS	AU, CA, CN, EP, IL, IN, JP, NZ	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
3/30/2010	U.S. 12/750,622	N/A	LIPOPEPTIDES FOR DELIVERY OF NUCLEIC ACIDS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
3/2/2007	U.S. 60/934,940	N/A	COMPOUNDS FOR INHIBITING TNF GENE EXPRESSION BY RIBONUCLEIC ACID INTERFERENCE AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
3/16/2007	U.S. 60/934,930	N/A	COMPOUNDS FOR INHIBITING GENE EXPRESSION BY RIBONUCLEIC ACID INTERFERENCE AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
4/20/2007	U.S. 60/934,931	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING VEGF GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
2/28/2008	U.S. 12/039,650	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING VEGF GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
4/24/2007	U.S. 60/934,928	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING VEGFB GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
4/25/2007	U.S. 60/934,943	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING FIGF GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
4/24/2007	U.S. 60/934,934	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING PGF GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
5/03/2007	U.S. 60/932,949	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING VEGF FAMILY GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
2/28/2008	PCT/US2008/055380	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING VEGF FAMILY GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MDRNA RESEARCH INC.	N/A
2/28/2008	U.S. 12/528,508	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING VEGF FAMILY GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
5/10/2007	U.S. 60/934,945	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING EGFR GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
2/28/2008	U.S. 12/039,658	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING ERBB GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
5/03/2007	U.S. 60/934,946	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING ERBB2 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
5/15/2007	U.S. 60/934,935	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING ERBB3 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
5/17/2007	U.S. 60/934,922	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING ERBB4 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
5/22/2007	U.S. 60/932,970	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING ERBB FAMILY GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
2/28/2008	PCT/US2008/055360	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING ERBB FAMILY GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MDRNA RESEARCH INC.	N/A
2/28/2008	U.S. 12/528,619	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING ERBB FAMILY GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
8/15/2007	U.S. 60/956,093	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING HIF1A GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
2/28/2008	PCT/US2008/055385	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING HIF1A GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MDRNA RESEARCH INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
2/28/2008	U.S. 12/528,786	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING HIF1A GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
9/18/2007	U.S. 60/973,397	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING RAF1 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
9/18/2007	U.S. 60/973,398	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING AKT1 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
2/28/2008	PCT/US2008/055339	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING AKT GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MDRNA RESEARCH INC.	N/A
2/28/2008	U.S. 12/039,662	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING AKT GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
12/12/2007	U.S. 61/013,212	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING AKT2 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
12/12/2007	U.S. 61/013,239	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING AKT3 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
11/20/2007	U.S. 60/989,419	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING BCL2 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
2/29/2008	PCT/US2008/055515	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING BCL2 GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MDRNA RESEARCH INC.	N/A
2/29/2008	U.S. 12/529,011	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING BCL2 GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
11/15/2007	U.S. 60/988,395	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING MYC GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
3/3/2008	PCT/US2008/55615	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING MYC GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MDRNA RESEARCH INC.	N/A
3/3/2008	U.S. 12/529,138	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING MYC GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
11/15/2007	U.S. 60/988,400	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING NRAS GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
3/3/2008	PCT/US2008/055644	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING RAS GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MDRNA RESEARCH INC.	N/A
3/3/2008	U.S. 12/529,302	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING RAS GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
11/15/2007	U.S. 60/988,401	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING HRAS GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
11/15/2007	U.S. 60/988,402	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING KRAS GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
12/20/2007	U.S. 61/015,611	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING WNT3A GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
3/3/2008	PCT/US2008/055649	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING WNT GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MDRNA RESEARCH INC.	N/A
3/3/2008	U.S. 12/529,532	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING WNT GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
2/28/2008	U.S. 12/039,668	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING APOB GENE EXPRESSION AND USES THEREOF	N/A	MDRNA RESEARCH INC.	N/A
09/02/2009	U.S. 12/552,082	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
12/15/2011	U.S. 13/327,545	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
09/02/2009	CA 2,677,068	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
09/02/2009	AU 2009212920	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
5/21/2008	PCT/US2008/64417	N/A	HYDROXYMETHYL SUBSTITUTED RNA OLIGONUCLEOTIDES AND RNA COMPLEXES	AU, BR, CA, CN, EP, HK, IL, IN, JP, KR, MX, MY, NZ, SG, ZA	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH; DEBIOPHARM

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
5/21/2008	U.S. 12/515,403	N/A	HYDROXYMETHYL SUBSTITUTED RNA OLIGONUCLEOTIDES AND RNA COMPLEXES	N/A	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH; DEBIOPHARM
8/5/2008	U.S. 61/086,435	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING BIRC5 GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
08/05/2009	PCT/US2009/052878	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING BIRC5 GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MARINA BIOTECH, INC.	N/A
2/4/2011	U.S. 13/057,741	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING BIRC5 GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
8/5/2008	U.S. 61/086,445	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING PLK FAMILY GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
08/05/2009	PCT/US2009/052888	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING PLK FAMILY GENE EXPRESSION AND USES THEREOF	CA, EP, JP	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
2/4/2011	U.S. 13/057,743	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING PLK FAMILY GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
10/16/2008	U.S. 61/106,062	N/A	COMPOSITIONS AND METHODS FOR LIPOSOMAL RNA THERAPEUTICS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
10/16/2009	PCT/US2009/060930	N/A	PROCESSES AND COMPOSITIONS FOR LIPOSOMAL AND EFFICIENT DELIVERY OF GENE SILENCING THERAPEUTICS	AU, BR, CA, CN, EP, HK, IL, IN, JP, KR, SG, ZA	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH; DEBIOPHARM
10/16/2009	U.S. 12/580,250	N/A	PROCESSES AND COMPOSITIONS FOR LIPOSOMAL AND EFFICIENT DELIVERY OF GENE SILENCING THERAPEUTICS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH; DEBIOPHARM
12/26/2008	U.S. 61/141,080	N/A	COMPOSITIONS AND METHODS FOR EFFICIENT DELIVERY OF GENE SILENCING THERAPEUTICS	N/A	MARINA BIOTECH, INC.	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH
12/03/2008	U.S. 61/119,624	N/A	RNA OLIGONUCLEOTIDES AND RNA COMPLEXES COMPRISING ACYCLIC NUCLEOMONOMERS	N/A	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
10/15/2009	U.S. 61/252,085	N/A	RNA COMPLEXES COMPRISING ACYCLIC NUCLEOMONOMERS	N/A	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.
12/3/2009	PCT/US2009/066610	N/A	UsiRNA COMPLEXES	AU, BR, CA, CN, EP, HK, IL, IN, JP, KR, SG, ZA	MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.; DEBIOPHARM
5/18/2011	U.S. 13/130,032	N/A	UsiRNA COMPLEXES		MARINA BIOTECH, INC.	ARROWHEAD RESEARCH CORP.; DEBIOPHARM
4/7/2009	U.S. 61/167,379	N/A	COMPOSITIONS AND METHODS FOR EFFICIENT DELIVERY OF GENE SILENCING THERAPEUTICS	N/A	MARINA BIOTECH, INC.	N/A
11/4/2009	U.S. 61/258,115	N/A	AMINO ACID-BASED NANOPARTICLE FORMULATIONS	N/A	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
11/4/2010	PCT/US2010/055516	N/A	ACTIVITY GENERATING DELIVERY MOLECULES	National Stage Pending	MARINA BIOTECH, INC.	N/A
3/26/2010	U.S. 61/318,141	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING SURVIVIN GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
3/25/2011	PCT/US2011/030100	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING SURVIVIN GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
4/19/2010	U.S. 61/325,757	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING HRAS GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	DEBIOPHARM
4/19/2011	PCT/US2011/033102	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING HRAS GENE EXPRESSION AND USES THEREOF	N/A	MARINA BIOTECH, INC.	DEBIOPHARM
4/26/2010	U.S. 61/328,140	N/A	MODIFIED FORMS OF NUCLEIC ACID COMPOUNDS AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
3/24/2011	U.S. 61/467,048	N/A	MODIFIED FORMS OF NUCLEIC ACID COMPOUNDS AND USES THEREOF	N/A	MARINA BIOTECH, INC.	N/A
4/26/2011	PCT/US2011/033980	N/A	NUCLEIC COMPOUNDS WITH CONFORMATIONALLY RESTRICTED MONOMERS AND USES THEREOF	National Stage Pending	MARINA BIOTECH, INC.	N/A
4/28/2010	U.S. 61/329,034	N/A	MULTI-SIRNA COMPOSITIONS FOR REDUCING GENE EXPRESSION	N/A	MARINA BIOTECH, INC.	DEBIOPHARM
4/28/2011	PCT/US2011/034354	N/A	MULTI-SIRNA COMPOSITIONS FOR REDUCING GENE EXPRESSION	National Stage Pending	MARINA BIOTECH, INC.	DEBIOPHARM
4/28/2011	PCT/US2011/034352	N/A	NUCLEIC ACID COMPOUNDS FOR INHIBITING FGFR3 GENE EXPRESSION AND USES THEREOF	National Stage Pending	MARINA BIOTECH, INC.	DEBIOPHARM
4/30/2002	U.S. 6,833,361	12/21/2004	NOVEL NUCLEOSIDES HAVING BICYCLIC SUGAR MOIETY	N/A	MARINA BIOTECH, INC.	VALEAN RESEARCH & DEVELOPMENT

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
12/11/1999	U.S. 6,403,566	6/11/2002	NOVEL NUCLEOSIDES HAVING BICYCLIC SUGAR MOIETY	N/A	MARINA BIOTECH, INC.	VALEAN RESEARCH & DEVELOPMENT
5/11/1999	U.S. 6,403,482	7/4/2000	CONFORMATIONALLY LOCKED NUCLEOSIDES AND OLIGONUCLEOTIDES	N/A	MARINA BIOTECH, INC.	VALEAN RESEARCH & DEVELOPMENT
11/2/1994	U.S. 5,681,940	10/28/1997	SUGAR MODIFIED NUCLEOSIDES AND OLIGONUCLEOTIDES	N/A	MARINA BIOTECH, INC.	VALEAN RESEARCH & DEVELOPMENT
2/28/2001	U.S. 6,831,069	12/14/2004	PYRROLO[2,3-D]PYRIMIDINE NUCLEOSIDE ANALOGS	DE	MARINA BIOTECH, INC.	VALEAN RESEARCH & DEVELOPMENT
12/31/2002	U.S. 7,081,449	7/25/2006	PYRIDO[2,3-D]PYRIMIDINE AND PYRIMIDO[4,5-D]PYRIMIDINE NUCLEOSIDES	N/A	MARINA BIOTECH, INC.	VALEAN RESEARCH & DEVELOPMENT
6/13/2008	PCT/US2008/007448	N/A	BACTERIA MEDIATED GENE SILENCING	EP, HK	MARINA BIOTECH, INC.	VITHERA LABORATORIES

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
12/08/2009	U.S. 12/632,985	N/A	BACTERIA MEDIATED GENE SILENCING	N/A	MARINA BIOTECH, INC.	VITHERA LABORATORIES
11/14/2008	U.S. 61/114,610	N/A	BACTERIA MEDIATED GENE SILENCING	N/A	MARINA BIOTECH, INC.	VITHERA LABORATORIES
05/20/2010	PCT/US2009/064409	N/A	E. COLI MEDIATED GENE SILENCING OF BETA-CATENIN	AU, BR, CA, CN, EP, HK, IL, IN, JP, KR, SG, ZA	MARINA BIOTECH, INC.	VITHERA LABORATORIES
11/13/2009	U.S. 12/618,401	N/A	E. COLI MEDIATED GENE SILENCING OF BETA-CATENIN	N/A	MARINA BIOTECH, INC.	VITHERA LABORATORIES
5/11/2011	U.S. 13/105,498	N/A	E. COLI MEDIATED GENE SILENCING OF BETA-CATENIN	N/A	MARINA BIOTECH, INC.	VITHERA LABORATORIES
2/21/2002	PCT/EP2002/001879	N/A	CATIONIC STEROL DERIVATIVES, PH-SENSITIVE LIPOSOMES COMPRISING CATIONIC STEROL DERIVATIVES AND METHOD FOR LOADING LIPOSOMES WITH ACTIVE SUBSTANCES	AU, CA, CN, EP, JP, SG	MARINA BIOTECH, INC.	PRONAI; MIRNA

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
2/11/2004	U.S. 7,312,206	12/25/2007	STEROL DERIVATIVES, LIPOSOMES COMPRISING STEROL DERIVATIVES AND METHOD FOR LOADING LIPOSOMES WITH ACTIVE SUBSTANCES	N/A	MARINA BIOTECH, INC.	PRONAI; MIRNA
2/21/2002	PCT/EP2002/001878	N/A	AMPHOTERIC STEROLS AND THE USE THEREOF IN THE PRODUCTION OF PH-SENSITIVE LIPOSOMES	AU, CA, CN, EP, SG	MARINA BIOTECH, INC.	N/A
2/11/2004	U.S. 7,407,947	8/5/2008	AMPHOTERIC STEROLS AND THE USE THEREOF	N/A	MARINA BIOTECH, INC.	PRONAI; MIRNA
2/21/2002	PCT/EP2002/001880	N/A	AMPHOTERIC STEROLS AND THE USE THEREOF	AU, BR, CA, CN, EP, JP, SG	MARINA BIOTECH, INC.	PRONAI; MIRNA
5/7/2007	U.S. 7,858,117	12/28/2010	AMPHOTERIC STEROLS AND THE USE THEREOF		MARINA BIOTECH, INC.	PRONAI; MIRNA
10/31/2006	U.S. 7,780,983	8/24/2010	AMPHOTERIC STEROLS AND THE USE THEREOF	N/A	MARINA BIOTECH, INC.	PRONAI; MIRNA

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
8/9/2010	U.S. 12/806,342	N/A	AMPHOTERIC STEROLS AND THE USE THEREOF	N/A	MARINA BIOTECH, INC.	PRONAI; MIRNA
2/21/2002	U.S. 7,371,404	5/13/2008	AMPHOTERIC STEROLS AND THE USE THEREOF	N/A	MARINA BIOTECH, INC.	PRONAI; MIRNA
2/19/2003	PCT/EP2003/001661	N/A	PH-SENSITIVE CATIONIC LIPIDS, AND LIPOSOMES AND NANOCAPSULES CONTAINING THE SAME	N/A	MARINA BIOTECH, INC.	N/A
8/16/2005	U.S. 10/505,107	N/A	PH-SENSITIVE CATIONIC LIPIDS, AND LIPOSOMES AND NANOCAPSULES CONTAINING THE SAME	N/A	MARINA BIOTECH, INC.	N/A
2/19/2003	PCT/EP2003/001662	N/A	COMPONENTS FOR PRODUCING AMPHOTERIC LIPOSOMES	EP	MARINA BIOTECH, INC.	N/A
11/8/2011	U.S. 13/291,650	N/A	COMPONENTS FOR PRODUCING AMPHOTERIC LIPOSOMES	N/A	MARINA BIOTECH, INC.	N/A

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
4/8/2005	U.S. 10/505,093	N/A	COMPONENTS FOR PRODUCING AMPHOTERIC LIPOSOMES	N/A	MARINA BIOTECH, INC.	N/A
3/29/2005	PCT/DE2005/000589	N/A	SERUM-STABLE AMPHOTERIC LIPOSOMES	EP	MARINA BIOTECH, INC.	N/A
9/2/2008	U.S. 10/594,553	N/A	SERUM-STABLE AMPHOTERIC LIPOSOMES		MARINA BIOTECH, INC.	N/A
09/15/2005	U.S. 60/717,291	N/A	SERUM STABLE LIPOSOMES COMPRISING AMPHOTER II LIPID MIXTURES	N/A	MARINA BIOTECH, INC.	N/A
11/05/2004	U.S. 60/625,195	N/A	SYSTEMIC DELIVERY OF CD40 ANTISENSE	N/A	MARINA BIOTECH, INC.	N/A
9/15/2006	PCT/EP2006/009013	N/A	IMPROVEMENTS IN OR RELATING TO AMPHOTERIC LIPOSOMES	AU, CA, EP, JP	MARINA BIOTECH, INC.	PRONAI; MIRNA

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
9/9/2010	U.S. 12/807,707	N/A	AMPHOTERIC LIPOSOMES	N/A	MARINA BIOTECH, INC.	PRONAI; MIRNA
03/16/2007	PCT/EP2007/002349	N/A	EFFICIENT METHOD FOR LOADING AMPHOTERIC LIPOSOMES WITH NUCLEIC ACID ACTIVE SUBSTANCES	EP	MARINA BIOTECH, INC.	PRONAI; MIRNA
09/12/2008	U.S. 12/225,030	N/A	EFFICIENT METHOD FOR LOADING AMPHOTERIC LIPOSOMES WITH NUCLEIC ACID ACTIVE SUBSTANCES	N/A	MARINA BIOTECH, INC.	PRONAI; MIRNA
10/12/2007	PCT/EP2007/008917	N/A	IMPROVEMENTS IN OR RELATING TO AMPHOTERIC LIPOSOMES	AU, EP, JP	MARINA BIOTECH, INC.	N/A
1/13/2012	U.S. 13/350,137	N/A	AMPHOTERIC LIPOSOMES, A METHOD OF FORMULATING AN AMPHOTERIC LIPOSOME AND A METHOD OF LOADING AN AMPHOTERIC LIPOSOME	N/A	MARINA BIOTECH, INC.	N/A
10/12/2008	PCT/EP2008/008621	N/A	AMPHOTERIC LIPOSOMES, A METHOD OF FORMULATING AN AMPHOTERIC LIPOSOME AND A METHOD OF LOADING AN AMPHOTERIC LIPOSOME	AU, EP, JP	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
6/8/2010	U.S. 12/682,703	N/A	AMPHOTERIC LIPOSOMES COMPRISING NEUTRAL LIPIDS	N/A	MARINA BIOTECH, INC.	N/A
12/19/2007	PCT/EP2007/011187	N/A	LIPIDS AND LIPIDS ASSEMBLIES COMPRISING TRANSFECTION ENHANCER ELEMENTS	EP, JP	MARINA BIOTECH, INC.	N/A
12/19/2007	U.S. 12/004,154	N/A	LIPIDS AND LIPIDS ASSEMBLIES COMPRISING TRANSFECTION ENHANCER ELEMENTS	N/A	MARINA BIOTECH, INC.	N/A
7/2/2010	PCT/EP2010/059487	N/A	EMULSION OF LIPOPROTEIN STRUCTURES	AU, BR, CA, CN, EP, HK, IL, IN, JP, KR, SG, ZA	MARINA BIOTECH, INC.	N/A
12/15/2011	U.S. 13/378,484	N/A	EMULSION OF LIPOPROTEIN STRUCTURES	N/A	MARINA BIOTECH, INC.	N/A
12/19/2007	PCT/EP2007/011188	N/A	CONSTRUCTION AND USE OF TRANSFECTION ENHANCER ELEMENTS	EP	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
10/5/2009	U.S. 12/448,452	N/A	CONSTRUCTION AND USE OF TRANSFECTION ENHANCER ELEMENTS	N/A	MARINA BIOTECH, INC.	N/A
12/1/2005	U.S. 60/741,192	N/A	AMPHOTERIC LIPOSOME FORMULATION	N/A	MARINA BIOTECH, INC.	N/A
12/1/2006	PCT/US2006/045955	N/A	AMPHOTERIC LIPOSOME FORMULATION	CA, EP, JP	MARINA BIOTECH, INC.	N/A
3/19/2009	U.S. 12/085,893	N/A	AMPHOTERIC LIPOSOME FORMULATION	N/A	MARINA BIOTECH, INC.	N/A
9/7/2011	U.S. 61/532,056	N/A	SYNTHESIS AND USES OF NUCLEIC ACID COMPOUNDS WITH CONFORMATIONALLY RESTRICTED MONOMERS	N/A	MARINA BIOTECH, INC.	N/A
10/20/2005	U.S. 60/728,877	N/A	INTRANASAL ADMINISTRATION OF INSULIN	N/A	MARINA BIOTECH, INC.	N/A

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
3/3/2006	U.S. 60/778,724	N/A	INTRANASAL ADMINISTRATION OF RAPID ACTING INSULIN	N/A	MARINA BIOTECH, INC.	N/A
7/10/2006	U.S. 60/806,904	N/A	INTRANASAL ADMINISTRATION OF RAPID ACTING INSULIN FORMULATION	N/A	MARINA BIOTECH, INC.	N/A
8/4/2006	U.S. 60/821,525	N/A	INTRANASAL ADMINISTRATION OF RAPID ACTING INSULIN	N/A	MARINA BIOTECH, INC.	N/A
9/15/2006	U.S. 60/825,876	N/A	INTRANASAL ADMINISTRATION OF RAPID ACTING INSULIN	N/A	MARINA BIOTECH, INC.	N/A
10/20/2006	PCT/US2006/41081	N/A	INTRANASAL ADMINISTRATION OF RAPID ACTING INSULIN	CN, EP, IN, KR	MARINA BIOTECH, INC.	N/A
10/20/2006	U.S. 12/672,478	N/A	INTRANASAL ADMINISTRATION OF RAPID ACTING INSULIN	N/A	MARINA BIOTECH, INC.	N/A

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
12/5/2006	U.S. 60/868,703	N/A	INTRANASAL ADMINISTRATION OF RAPID ACTING INSULIN	N/A	MARINA BIOTECH, INC.	N/A
3/9/2007	U.S. 60/894,130	N/A	INTRANASAL ADMINISTRATION OF RAPID ACTING INSULIN	N/A	MARINA BIOTECH, INC.	N/A
4/19/2007	PCT/US2007/67007	N/A	INTRANASAL ADMINISTRATION OF ULTRA-RAPID ACTING INSULIN	EP, IN	MARINA BIOTECH, INC.	N/A
4/19/2007	U.S. 12/376,205	N/A	INTRANASAL ADMINISTRATION OF ULTRA-RAPID ACTING INSULIN	N/A	MARINA BIOTECH, INC.	N/A
12/7/2011	U.S. 13/314,080	N/A	INTRANASAL ADMINISTRATION OF ULTRA-RAPID ACTING INSULIN	N/A	MARINA BIOTECH, INC.	N/A
5/10/2004	U.S. 60/570,113	N/A	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PARATHYROID HORMONE	N/A	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
5/10/2005	PCT/US2005/16530	N/A	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PARATHYROID HORMONE	CN, EP, KR	MARINA BIOTECH, INC.	N/A
5/10/2005	U.S. 7,244,709	7/17/2007	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PARATHYROID HORMONE	N/A	MARINA BIOTECH, INC.	N/A
10/17/2006	U.S. 7,435,720	10/14/2008	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PARATHYROID HORMONE	N/A	MARINA BIOTECH, INC.	N/A
5/4/2007	U.S. 11/744,745	N/A	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PARATHYROID HORMONE	N/A	MARINA BIOTECH, INC.	N/A
3/17/2010	U.S. 12/726,308	N/A	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PARATHYROID HORMONE	N/A	MARINA BIOTECH, INC.	N/A
3/17/2020	U.S. 12/726,315	N/A	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PARATHYROID HORMONE	N/A	MARINA BIOTECH, INC.	N/A

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
4/10/2006	PCT/US2006/13377	N/A	PTH FORMULATIONS AND METHODS OF USE	CN, EP, IN, KR	MARINA BIOTECH, INC.	N/A
12/17/2002	U.S. 7,166,575	1/23/2007	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PEPTIDE YY AND METHODS FOR TREATING AND PREVENTING OBESITY	N/A	MARINA BIOTECH, INC.	N/A
8/7/2003	U.S. 60/493,226	N/A	PROTEIN-FREE FORMULATION OF PEPTIDE YY SUITABLE FOR INTRANASAL ADMINISTRATION	N/A	MARINA BIOTECH, INC.	N/A
9/8/2003	U.S. 60/501,170	N/A	PROTEIN-FREE FORMULATION OF PEPTIDE YY SUITABLE FOR INTRANASAL ADMINISTRATION	N/A	MARINA BIOTECH, INC.	N/A
10/10/2003	U.S. 60/510,785	N/A	PROTEIN-FREE FORMULATION OF PEPTIDE YY SUITABLE FOR INTRANASAL ADMINISTRATION	N/A	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
11/4/2003	U.S. 60/517,290	N/A	PROTEIN-FREE FORMULATION OF PEPTIDE YY SUITABLE FOR INTRANASAL ADMINISTRATION	N/A	MARINA BIOTECH, INC.	N/A
11/10/2003	U.S. 60/518,812	N/A	PROTEIN-FREE FORMULATION OF PEPTIDE YY SUITABLE FOR INTRANASAL ADMINISTRATION	N/A	MARINA BIOTECH, INC.	N/A
1/30/2004	U.S. 7,157,426	1/2/2007	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF PEPTIDE YY AND METHODS FOR TREATING AND PREVENTING OBESITY	N/A	MARINA BIOTECH, INC.	N/A
12/23/2003	U.S. 7,186,691	3/6/2007	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF Y2 RECEPTOR-BINDING PEPTIDES AND METHODS FOR TREATING AND PREVENTING OBESITY	N/A	MARINA BIOTECH, INC.	N/A
2/17/2004	U.S. 7,229,966	6/12/2007	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY OF Y2 RECEPTOR-BINDING PEPTIDES AND METHODS FOR TREATING AND PREVENTING OBESITY	N/A	MARINA BIOTECH, INC.	N/A

FILING DATE	IDENTIFIER	ISSUE DATE	TITLE	FOREIGN FILINGS	OWNER	LICENSEE OF MARINA
6/16/2004	U.S. 7,186,692	3/6/2007	COMPOSITIONS AND METHODS FOR ENHANCED MUCOSAL DELIVERY AND NON-INFUSED ADMINISTRATION OF Y2 RECEPTOR-BINDING PEPTIDES AND METHODS FOR TREATING AND PREVENTING OBESITY	N/A	MARINA BIOTECH, INC.	N/A
9/19/2008	U.S. 7,863,245	1/4/2011	COMPOSITIONS FOR ENHANCED EPITHELIAL PERMEATION OF PEPTIDE YY FOR TREATING OBESITY	N/A	MARINA BIOTECH, INC.	N/A

ACKNOWLEDGEMENT OF GRANTOR
INTELLECTUAL PROPERTY SECURITY AGREEMENT
SIGNATURE PAGE