PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3540628

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
EUGEN UHLMANN	09/12/2013
ROMESH SUBRAMANIAN	09/11/2013
ARTHUR M. KRIEG	09/11/2013

RECEIVING PARTY DATA

Name:	RANA THERAPEUTICS, INC.
Street Address:	790 MEMORIAL DRIVE
Internal Address:	SUITE 203
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14698115

CORRESPONDENCE DATA

Fax Number: (617)646-8646

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: 617-646-8000

Email: patents_DanY@WolfGreenfield.com **Correspondent Name:** WOLF, GREENFIELD & SACKS, P.C.

Address Line 1: **600 ATLANTIC AVENUE**

Address Line 4: BOSTON, MASSACHUSETTS 02210

ATTORNEY DOCKET NUMBER:	R0693.70019US03
NAME OF SUBMITTER:	DANIEL W. YOUNG
SIGNATURE:	/Daniel W. Young/
DATE SIGNED:	09/24/2015

Total Attachments: 5

source=R0693.70019US03 - Assignment#page1.tif source=R0693.70019US03 - Assignment#page2.tif source=R0693.70019US03 - Assignment#page3.tif

> **PATENT** REEL: 036646 FRAME: 0459 503494003

source=R0693.70019US03 - Assignment#page4.tif source=R0693.70019US03 - Assignment#page5.tif

PATENT REEL: 036646 FRAME: 0460

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to RaNA Therapeutics, Inc., having a place of business at 790 Memorial Drive: Suite 203; Cambridge, Massachusetts 02139, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the provisional application filed in the United States Patent and Trademark Office on September 14, 2012 under No. 61/701,351, bearing Attorney Docket No. R0693.70019US00, and entitled MULTIMERIC OLIGONUCLEOTIDE COMPOUNDS, and in the provisional application filed in the United States Patent and Trademark Office on March 14, 2013 under No. 61/783,272, bearing Attorney Docket No. R0693.70019US01, and entitled MULTIMERIC OLIGONUCLEOTIDE COMPOUNDS, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation;
- 5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket No. R0693.70019US00 Page 1 of 2 **3218481.1**

Sept 12, 2013 Date	Inventor: Address:	Eugen Chlmann Zum Talblick 31 D-61479 Glashutten
	Citizenship:	GERMANY Germany
Witness: Sept 12, 2013 Date	Signature Name: Address:	Klara Uhlmann
Witness:		/
Date	Signature	
	Name:	
	Address:	

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- 1. Sell, assign and transfer to RaNA Therapeutics, Inc., having a place of business at 790 Memorial Drive; Suite 203; Cambridge, Massachusetts 02139, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the provisional application filed in the United States Patent and Trademark Office on September 14, 2012 under No. 61/701,351, bearing Attorney Docket No. R0693.70019US00, and entitled MULTIMERIC OLIGONUCLEOTIDE COMPOUNDS, and in the provisional application filed in the United States Patent and Trademark Office on March 14, 2013 under No. 61/783,272, bearing Attorney Docket No. R0693,70019US01, and entitled MULTIMERIC OLIGONUCLEOTIDE COMPOUNDS, and in and to the applications and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea:
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation;
- 5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket No. R0693,70019US00

Page 1 of 3

3202867.1

9//1//3 Date	Inventor:	Romesh Subramanian	R. Serbinan
	Address:		
		Framingham, Massachus	setts 01701
	Citizenship:		
Witness: 9/11/13 Date	Signature Name: Address:	-Emily B	3rand St. #3 MA 02135
Witness: 9/11/13	Signature	224	<u></u>
	Name:	Rene	astro
*	Address:	7/ Fox R	4,4828
		Waltham 1	<u> MA OQ457</u>

Sept 1, 2013		and 15
Date ⁸	Inventor: A	rthur M. Krieg 🥒 🥏
	Address: 1	30 Winding River Road
	N	leedham, Massachusetts 02492
	Citizenship: U	S.
Witness: 9/1/13		
Date / /	Signature	
	Name:	Mene astro
	Address:	71 Fox Rd, #828
		Weltham, MA 02
		merce A

Witness:

Date

Signature

Name:

Address:

K Drank

Brock St. #

Brighton MA 02135

RECORDED: 09/24/2015