503845809 05/27/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3892457

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUHAIB SIDDIQI	01/10/2013

RECEIVING PARTY DATA

Name:	MODERNA THERAPEUTICS, INC.	
Street Address:	200 TECHNOLOGY SQUARE	
City:	CAMBRIDGE	
State/Country:	MASSACHUSETTS	
Postal Code:	02139	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15143364

CORRESPONDENCE DATA

Fax Number: (617)937-2400

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) 937-2337

Email: fvandermaelen@cooley.com

Correspondent Name: COOLEY LLP, ATTN: PATENT GROUP Address Line 1: 1299 PENNSYLVANIA AVENUE, NW

Address Line 2: SUITE 700

Address Line 4: WASHINGTON, D.C. 20004

ATTORNEY DOCKET NUMBER:	MRNA-015C03US 322140-2040	
NAME OF SUBMITTER:	LIAN OUYANG	
SIGNATURE:	/Lian Ouyang/	
DATE SIGNED:	05/27/2016	

Total Attachments: 2

source=MRNA-015C03US - Assignment SIDDIQI to MODERNA#page1.tif source=MRNA-015C03US - Assignment SIDDIQI to MODERNA#page2.tif

PATENT REEL: 038733 FRAME: 0770 503845809

ASSIGNMENT

:

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to modeRNA. Therapeutics, Inc., having a place of business at 161 First Street, 1" Floor, Cambridge, MA 02142, ("ASSIGNEE"), for itself and its successors, transferees, and assignces, the following:

- I. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional applications filed under 35 U.S.C. § 111(b), non-provisional applications filed under 35 U.S.C. § 111(a), international applications filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase applications filed under 35 U.S.C. § 371 ("APPLICATION"):
 - Application No. 61/404,413, entitled "ENGINEERED NUCLEIC ACIDS AND METHODS OF USE THEREOF", filed October 1, 2010.
 - Application No. 13/251,840, entitled "MODIFIED NUCLEOSIDES, NUCLEOTIDES, AND NUCLEIC ACIDS, AND USES THEREOF", filed October 3, 2011.
 - Application No. <u>PCT/US2011/054617</u>, entitled "<u>MODIFIED</u>
 <u>NUCLEOSIDES, NUCLEOTIDES, AND NUCLEIC ACIDS</u>, AND USES <u>THEREOF</u>", filed <u>October 3, 2011</u>.
 - Application No. <u>13/481,127</u>, entitled "<u>MODIFIED NUCLEOSIDES</u>, <u>NUCLEOTIDES</u>, <u>AND NUCLEIC ACIDS</u>, <u>AND USES THEREOF</u>", filed <u>May 25, 2012</u>.
 - Application No. <u>13/739,212</u>, entitled "MODIFIED NUCLEOSIDES, NUCLEOTIDES, AND NUCLEIC ACIDS, AND USES THEREOF", filed January 11, 2013.
 - 2. The entire worldwide right, title, and interest in and to:
- (a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to earry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully

OB) 12/18/14

secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Date 01/10/2013

Signature

lame <u>Suhaib Siddi</u>