

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JENNIFER A. DOUDNA	01/31/2014
MARTIN JINEK	02/01/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
<b>Street Address:</b>	1111 FRANKLIN STREET
<b>Internal Address:</b>	12TH FLOOR
<b>City:</b>	OAKLAND
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94607
<b>PROPERTY NUMBERS Total: 12</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16382093
Application Number:	16382096
Application Number:	16382097
Application Number:	16382100
Application Number:	16383412
Application Number:	16383422
Application Number:	16383433
Application Number:	16383443
Application Number:	16385360
Application Number:	16385383
Application Number:	16380758
Application Number:	16380781
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(650)327-3231
<i>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.</i>	
<b>Phone:</b>	6503273400
<b>Email:</b>	lam@bozpat.com

<b>Correspondent Name:</b>	BOZICEVIC, FIELD AND FRANCIS LLP
<b>Address Line 1:</b>	201 REDWOOD SHORES PARKWAY
<b>Address Line 2:</b>	SUITE 200
<b>Address Line 4:</b>	REDWOOD CITY, CALIFORNIA 94065

<b>ATTORNEY DOCKET NUMBER:</b>	BERK-187GEN
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<b>NAME OF SUBMITTER:</b>	KYLE A. GURLEY
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<b>SIGNATURE:</b>	/Kyle A. Gurley/
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<b>DATE SIGNED:</b>	04/30/2019
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**Total Attachments: 5**

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**ASSIGNMENT**

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

1. Jennifer A. Doudna,
2. Martin Jinek
3. Lei S. Qi
4. James Harrison Doudna Cate
5. Wendell A. Lim

hereby sells, assigns and transfers to ASSIGNEE, The Regents of the University of California, a California Corporation, having its statewide administrative offices located 1111 Franklin Street, Twelfth Floor, Oakland, CA 94607-5200, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention entitled:

"Methods and Compositions for RNA-Directed Target DNA Modification and For RNA-Directed Modulation of Transcription"

and which is found in

- (a) \_\_\_\_\_ U.S. provisional application filed herewith and listing the above named persons as inventors
- (b) \_\_\_\_\_ U.S. patent application filed herewith and listing the above named persons as inventors
- (c) X U.S. application serial no. 13/842,859, filed on March 15, 2013
- (d) \_\_\_\_\_ U.S. Patent No.: \_\_\_\_\_, issued \_\_\_\_\_
- (e) \_\_\_\_\_ PCT Patent Application No. \_\_\_\_\_, filed on \_\_\_\_\_

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 USC 111(a) or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further agrees that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, post grant review, inter partes review, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of the University of California.

Executed this

31 day of Jan., 2014

\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

Signature of Inventor(s)

Jennifer A. Doudna  
Jennifer A. Doudna

\_\_\_\_\_  
Martin Jinek

\_\_\_\_\_  
Lei S. Qi

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Executed this

Signature of Inventor(s)

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Jennifer A. Doudna

<sup>1st</sup> \_\_\_\_\_ day of February, 2014

\_\_\_\_\_  
Martin Jinek

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Lei S. Qi

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Executed this

Signature of Inventor(s)

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Jennifer A. Doudna

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Martin Jinek

*8/13/13*  
\_\_\_\_\_ day of November, 2013

*[Signature]*  
\_\_\_\_\_  
Lei S. Qi

ASSIGNMENT  
Atty Docket No.: BERK-187  
UC Case No.: BK-2012-115-5

11<sup>th</sup> day of November, 2013

James Harrison Doudna Cate  
James Harrison Doudna Cate

\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

Wendell A. Lim

Assignee hereby accepts this Assignment:

Paula Borden Patent Agent Aug. 4, 2014  
Name Title Date

Page 2 of 2

PATENT  
REEL: 049038 FRAME: 0836

Page 1 of 2

\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

8<sup>th</sup> day of November, 2013

James Harrison Doudna Cate

  
Wendell A. Lim

Assignee hereby accepts this Assignment:

Name	Title	Date
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