

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4031058

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	MERGER
EFFECTIVE DATE:	07/01/2016
CONVEYING PARTY DATA	
Name	Execution Date
PALMER LABS, LLC	06/30/2016
RECEIVING PARTY DATA	
Name:	8 RIVERS CAPITAL, LLC
Street Address:	406 BLACKWELL STREET
City:	DURHAM
State/Country:	NORTH CAROLINA
Postal Code:	27701
PROPERTY NUMBERS Total: 3	
Property Type	Number
Application Number:	61799931
Application Number:	14211698
Application Number:	15251408
CORRESPONDENCE DATA	
Fax Number:	(919)755-2150
<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>	
Phone:	919-755-2100
Email:	dgravius@wcsr.com
Correspondent Name:	RYAN W. CAGLE
Address Line 1:	555 FAYETTEVILLE STREET
Address Line 2:	WOMBLE CARLYLE SANDRIDGE & RICE, LLP
Address Line 4:	RALEIGH, NORTH CAROLINA 27601
ATTORNEY DOCKET NUMBER:	P62622 1330US.2C1 (0356.3)
NAME OF SUBMITTER:	RYAN W. CAGLE
SIGNATURE:	/ryan w. cagle/
DATE SIGNED:	08/30/2016
Total Attachments: 7	
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Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"PALMER LABS, LLC", A DELAWARE LIMITED LIABILITY COMPANY, WITH AND INTO "8 RIVERS CAPITAL, LLC" UNDER THE NAME OF "8 RIVERS CAPITAL, LLC", A LIMITED LIABILITY COMPANY ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE ON THE THIRTIETH DAY OF JUNE, A.D. 2016, AT 4:14 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF MERGER IS THE FIRST DAY OF JULY, A.D. 2016 AT 12:01 O'CLOCK A.M.



4543751 8100M
SR# 20164734074

You may verify this certificate online at corp.delaware.gov/authver.shtml

A handwritten signature in black ink, appearing to read "JBullock", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed in a small font.

Authentication: 202599836
Date: 07-01-16

PATENT
REEL: 039589 FRAME: 0341

**STATE OF DELAWARE
CERTIFICATE OF MERGER OF
PALMER LABS, LLC WITH AND INTO
8 RIVERS CAPITAL, LLC**

This Certificate of Merger is filed by 8 Rivers Capital, LLC, a Delaware limited liability company (the "Surviving Entity"), in accordance with the provisions of Section 18-209(c) of the Delaware Limited Liability Company Act (the "LLC Act"), for the purpose of merging Palmer Labs, LLC, a Delaware limited liability company (the "Merging Entity," and together with the Surviving Entity, the "Constituent Entities"), with and into the Surviving Entity (the "Merger").

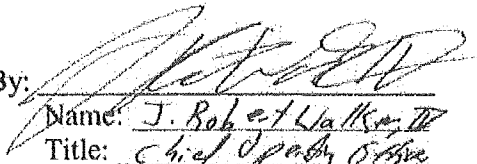
1. The name, jurisdiction of formation, and entity type of the Constituent Entities are:

<u>Name</u>	<u>Jurisdiction of Formation and Entity Type</u>
Palmer Labs, LLC	Delaware limited liability company
8 Rivers Capital, LLC	Delaware limited liability company

2. An Agreement and Plan of Merger (the "Merger Agreement") has been approved and executed by each of the Constituent Entities in accordance with Section 18-209 of the LLC Act.
3. The name of the Surviving Entity is 8 Rivers Capital, LLC.
4. The Certificate of Formation of the Surviving Entity as in effect immediately prior to the effective time of the Merger shall be the Certificate of Formation of the Surviving Entity following the Merger and shall not be amended as a result of the Merger.
5. The Merger shall be effective at 12:01 a.m. on July 1, 2016.
6. The Merger Agreement is on file at the offices of the Surviving Entity located at 406 Blackwell Street, Crowe Building – Fourth Floor, Durham, North Carolina 27701.
7. A copy of the Merger Agreement will be furnished by the Surviving Entity, on request and without cost, to any member of the Merging Entity or any member of the Surviving Entity.

Dated: June 30, 2016.

8 RIVERS CAPITAL, LLC

By: 
Name: J. Robert Walker, III
Title: Chief Operating Officer

[Signature Page to Certificate of Merger]

WCSR 32391823v2

PATENT
REEL: 039589 FRAME: 0343



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JULY 17, 2014

PTAS

RYAN W. CAGLE
150 FAYETTEVILLE STREET, SUITE 2100
WOMBLE CARLYLE SANDRIDGE & RICE, LLP
RALEIGH, NC 27601

502893804

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT RECORDATION BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 07/16/2014

REEL/FRAME: 033322/0457
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: P62622 1330US.2 (0204.4)

ASSIGNOR:

PALMER, MILES R.

DOC DATE: 07/15/2014

ASSIGNEE:

PALMER LABS, LLC
406 BLACKWELL STREET
DURHAM, NORTH CAROLINA 27701

APPLICATION NUMBER: 14211698

FILING DATE: 03/14/2014

PATENT NUMBER:

ISSUE DATE:

TITLE: LAUNCH VEHICLE AND SYSTEM AND METHOD FOR ECONOMICALLY EFFICIENT
LAUNCH THEREOF

ASSIGNMENT RECORDATION BRANCH
PUBLIC RECORDS DIVISION

**COMBINED WORLDWIDE INVENTION ASSIGNMENT AND
U.S. DECLARATION (37 CFR 1.63)**

WHEREAS, the undersigned (hereinafter collectively referred to as "Assignor") has or may have invented certain inventions and improvements disclosed in the United States patent application entitled "**LAUNCH VEHICLE AND SYSTEM AND METHOD FOR ECONOMICALLY EFFICIENT LAUNCH THEREOF**" and designated as

- ☒ Application No. 14/211,698; filed March 14, 2014
- ☒ Application claims priority from Application No. 61/799,931, filed March 15, 2013, all applications listed above being hereinafter referred to as the "Application(s)";

WHEREAS, it is agreed that

Palmer Labs, LLC
406 Blackwell Street
Durham, NC 27701

(hereinafter referred to as "Assignee"), is entitled to or is desirous of acquiring all right, title and interest related to the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor, by these presents, does sell, assign, and transfer unto Assignee the full, exclusive and entire right, title and interest, worldwide: (i) in and to all inventions and improvements disclosed and described in the Application(s); (ii) in and to said Application(s) and any other United States national stage, provisional, non-provisional, divisional, continuation, continuation-in-part, or design patent applications based in whole or in part upon said inventions or improvements and/or claiming priority to said Application(s) (the "U.S. Applications"); (iii) in and to any Patent Cooperation Treaty applications based in whole or in part upon said inventions or improvements and/or claiming priority to said Application(s); (iv) in and to any and all applications for industrial property protection, including without limitation applications for patent, utility model, inventor's certificate, and design, filed or which are hereafter filed in countries outside the United States (the "Foreign Applications") and which

describe in whole or in part said inventions and improvements, said Foreign Applications to be filed and issued in the name of Assignee or its designee insofar as permitted by applicable law; (v) in and to all patents or similar protective rights in the United States or elsewhere which may be granted on the U.S. Applications and Foreign Applications and all reissues, reexaminations, and extensions thereof, any and all such patents or other protective rights to issue in the name of Assignee and for the sole use and behoof of Assignee and its successors and assigns; and (vi) in and to the right to claim any applicable foreign or domestic priority rights arising from or required for any of the aforementioned applications under the terms of any applicable conventions, treaties, statutes, or regulations.

AND, for the same consideration, Assignor agrees to (i) communicate to Assignee, its successors, legal representatives, and assigns, any facts known to Assignor respecting said inventions and improvements or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody said inventions or improvements; (ii) sign or execute all lawful papers, applications, declarations, affidavits, assignments, and rightful oaths that may be requested by Assignee during prosecution or enforcement of any rights related to the inventions and improvements; (iii) testify in any proceedings relating to said inventions or improvements or rights granted therefor; and (iv) generally do everything possible to aid Assignee and its successors, legal representatives and assigns, to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world.

Assignor covenants with Assignee, its successors, legal representatives, and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned. Assignor further agrees that Assignee, its successors, legal representatives, and assigns, may insert into this Assignment any further text necessary or desirable to define the Applications to which the Assignment pertains for purposes of recordation, and also agrees that the Assignment is effective at least as early as March 15, 2013 the earliest priority date of the Application(s).

U.S. DECLARATION: Assignor intends for this Assignment to serve as a U.S. declaration under 37 CFR 1.63(e)(1). Accordingly, with respect to the U.S. Applications identified herein, each undersigned inventor hereby declares that: (1) the above-identified application was made or authorized to be made by me; (2) I believe that I am the original inventor or an original joint inventor of a claimed invention in the application; and (3) I hereby

acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

7-15-14
Date

Miles R. Palmer
MILES R. PALMER

State of North Carolina)
County of Durham)

I, Christina M. Rardon, a Notary Public for said County and State, do hereby certify that MILES R. PALMER personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 15th day of July, 2014.

(Official Seal)

Christina M. Rardon
Notary Public

My commission expires 01/08/2019

