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| <b>PATENT ASSIGNMENT COVER SHEET</b> |
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6112522

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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>                    |
| EDWARD A. CLARK   | 04/25/2019                               |
| DEBORAH FULLER  | 12/07/2018                               |
| MICHAEL GALE  | 12/07/2018                               |
| <b>RECEIVING PARTY DATA</b>   |  |
| <b>Name:</b>  | UNIVERSITY OF WASHINGTON                 |
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| <b>City:</b>  | SEATTLE                                  |
| <b>State/Country:</b>   | WASHINGTON                               |
| <b>Postal Code:</b>   | 98105                                    |
| <b>PROPERTY NUMBERS Total: 1</b>  |  |
| <b>Property Type</b>  | <b>Number</b>                            |
| <b>Application Number:</b>  | 16764950                                 |
| <b>CORRESPONDENCE DATA</b>  |  |
| <b>Fax Number:</b>  | (312)913-0002                            |
| <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> |  |
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| <b>Email:</b>   | harper@mbhb.com                          |
| <b>Correspondent Name:</b>  | MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP |
| <b>Address Line 1:</b>  | 300 SOUTH WACKER DRIVE                   |
| <b>Address Line 2:</b>  | SUITE #3100                              |
| <b>Address Line 4:</b>  | CHICAGO, ILLINOIS 60606                  |
| <b>ATTORNEY DOCKET NUMBER:</b>  | 17-1273-PCT-US                           |
| <b>NAME OF SUBMITTER:</b>   | DAVID HARPER                             |
| <b>SIGNATURE:</b>   | /David Harper/                           |
| <b>DATE SIGNED:</b>   | 05/19/2020                               |
| <b>Total Attachments: 5</b>   |  |
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source=17-1273-PCT Assignment (EXECUTED)#page5.tif

**ASSIGNMENT**

MBHB Case No.: 17-1273-PCT

Serial No(s): PCT/US18/61218

Inventors: Edward A. Clark, Che-Leung Law, Deborah Fuller and Michael Gale

Filing Date(s): November 15, 2018

In consideration of good and valuable consideration provided to assignor, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**University of Washington  
4545 Roosevelt Way NE, Suite 400  
Seattle, WA 98105-4721**

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

**“A Therapeutic Vaccine for Hepatitis B Virus (HBV( Using the HBV PreS1 and/or PreS2 and/or S-HBsAg Regions of the HBV Envelope Protein”**

and identified as:

**Case No. 17-1273-PCT**

in the offices of McDONNELL BOEHNEN HULBERT & BERGHOFF LLP and in said application and any and all other applications, both United States and foreign (including but not limited to all countries on the list below\*), which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries (including but not limited to all countries on the list below\*), which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

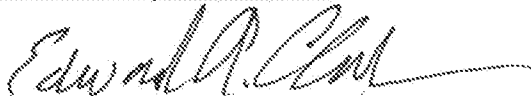
The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries (including but not limited to all countries on the list below\*) on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations

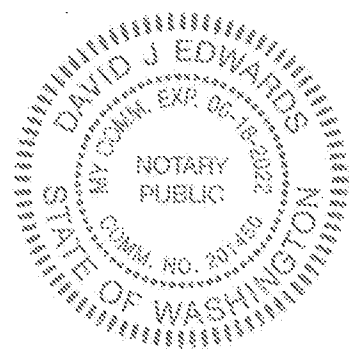
the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

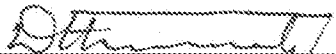
\*Countries include, but are not limited to: all member countries of the Patent Cooperation Treaty (PCT) including Albania, Algeria, Antigua and Barbuda, Armenia, Australia, Austria, Azerbaijan, Barbados, Belarus, Belgium, Belize, Benin, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Congo, Costa Rica, Cote d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Democratic People's Republic of Korea, Denmark, Dominica, Ecuador, Estonia, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Grenada, Guinea, Guinea-Bissau, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Kenya, Krygyzstan, Latvia, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Mali, Mauritania, Mexico, Monaco, Mongolia, Morocco, Netherlands, New Zealand, Niger, Norway, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Saint Lucia, Senegal, Sierra Leone, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Swaziland, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Togo, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, United Kingdom, United Republic of Tanzania, United States of America, Uzbekistan, Vietnam, Yugoslavia, Zambia, Zimbabwe.

WITNESS my hand and seal this 25<sup>th</sup> day of April, <sup>2019</sup>2018  
  
Edward A. Clark

State of Washington  
County of King

The foregoing instrument was acknowledged before me this 25<sup>th</sup> day of April, <sup>2019</sup>2018 by Edward A. Clark



  
NOTARY PUBLIC

WITNESS my hand and seal this 7 day of December, 2018

Deborah Fuller  
Deborah Fuller

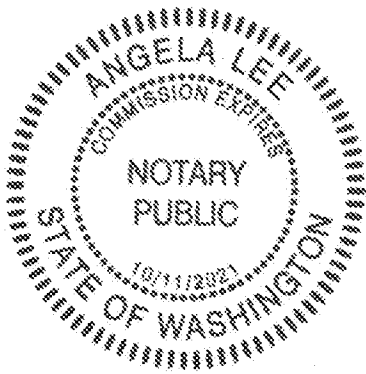
State of Washington

County of King

The foregoing instrument was acknowledged before me this 7<sup>th</sup> day of December, 2018 by Deborah Fuller

Angela Lee

NOTARY PUBLIC



WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2018

\_\_\_\_\_  
Michael Gale

State of \_\_\_\_\_

County of \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2018 by \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
**Deborah Fuller**

State of \_\_\_\_\_

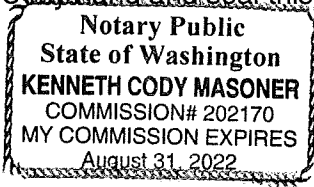
County of \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of

\_\_\_\_\_, 2018 by \_\_\_\_\_

\_\_\_\_\_  
NOTARY PUBLIC

WITNESS my hand and seal this 7<sup>th</sup> day of DECEMBER 2018.



\_\_\_\_\_  
**Michael Gale**

State of WA

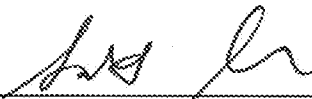
County of KING

The foregoing instrument was acknowledged before me this 7<sup>th</sup> day of

DECEMBER, 2018 by MICHAEL GALE

  
NOTARY PUBLIC

Accepted and Agreed to by Assignee, **University of Washington**

Signature:   
Printed Name: SCOTT Sae 176  
Title: Copyright & Trademark Manager  
Date: June 13, 2019