

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3918544

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
YAO-LING QIU	05/04/2016
HUI CAO	05/04/2016
WEI LI	05/04/2016
JORDEN KASS	05/04/2016
XURI GAO	05/04/2016
XIAOWEN PENG	05/04/2016
MEIZHONG JIN	05/04/2016
YAT SUN OR	05/04/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ENANTA PHARMACEUTICALS, INC.
<b>Street Address:</b>	500 ARSENAL STREET
<b>City:</b>	WATERTOWN
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02472
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15088517
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(978)251-3973
<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>	9782513509
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<b>Correspondent Name:</b>	ELMORE PATENT LAW GROUP, P.C.
<b>Address Line 1:</b>	484 GROTON ROAD
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<b>ATTORNEY DOCKET NUMBER:</b>	4014.1276 US1
<b>NAME OF SUBMITTER:</b>	EDGAR W. HARLAN, REG. NO. 42632
<b>SIGNATURE:</b>	/Edgar W. Harlan/

<b>DATE SIGNED:</b>	06/13/2016
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**Total Attachments: 8**

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- source=4014.1276 US1 Exec Assign\_00288306#page8.tif

ASSIGNMENT

WHEREAS, we, Yao-Ling Qiu, Hui Cao, Wei Li, Jordan Kass, Xuri Gao, Xiaowen Peng, Meizhong Jin and Yat Sun Or have invented a certain improvement in Hepatitis B Antiviral Agents described in an application for Letters Patent of the United States, the specification of which:

- is being executed on even date herewith and is about to be filed in the United States Patent Office;
- was filed on April 1, 2016 as Application No. 15/088,517;
- was patented under U.S. Patent No. [ ] on [ ] .

WHEREAS, Enanta Pharmaceuticals, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 500 Arsenal Street, Watertown, MA 02472 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application and all divisionals, renewals, and continuations thereof, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon and all reissues and extensions thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property including, without limitation, all applications for patents, utility models and designs which may be filed for said invention in any countries foreign to the United States together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed as may be applicable; and all forms of industrial property protection including, without limitation, patents, utility models, inventor's certificates, and designs which may be granted for said invention in any country foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby covenant and agree that we have full right to convey the entire interest herein assigned and that we have not executed, and will not execute, any agreement in conflict herewith;

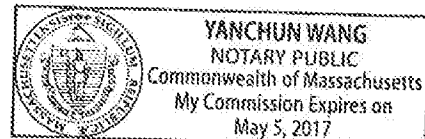
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AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: *Yao-Ling Qiu*  
YAO-LING QIU

State/Commonwealth of Massachusetts  
County of Middlesex



On this 4<sup>th</sup> day of MAY, 2016, before me, the undersigned notary public, personally appeared YAO-LING QIU proved to me through satisfactory evidence of identification, which were known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the foregoing instrument as his/her free act and deed.

*Yanchun Wang* Notary Public  
Yanchun Wang (print name)  
My Commission expires 05/05/2017

(SEAL)

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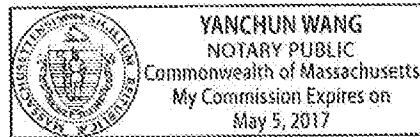
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IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: Hui Cao  
HUI CAO

State/Commonwealth of Massachusetts  
County of Middlesex



On this 4th day of May, 2016, before me, the undersigned notary public, personally appeared HUI CAO proved to me through satisfactory evidence of identification, which were known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the foregoing instrument as his/her free act and deed.

Yanchun Wang Notary Public  
Yanchun Wang (print name)  
My Commission expires 05/05/2017

(SEAL)

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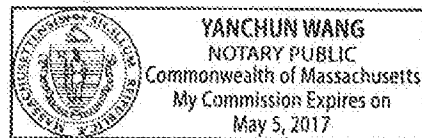
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IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: *Wei Li*  
WEI LI

State/Commonwealth of Massachusetts  
County of Middlesex



On this 4<sup>th</sup> day of May, 2016, before me, the undersigned notary public, personally appeared WEI LI proved to me through satisfactory evidence of identification, which were known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the foregoing instrument as his/her free act and deed.

*Yanchun Wang* Notary Public  
Yanchun Wang (print name)  
My Commission expires 05/05/2017

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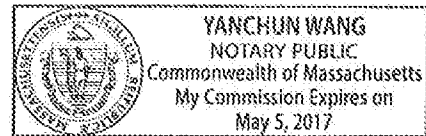
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IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: [Signature]  
JORDEN KASS

State/Commonwealth of Massachusetts  
County of Middlesex



On this 4<sup>th</sup> day of May, 2016, before me, the undersigned notary public, personally appeared **JORDEN KASS** proved to me through satisfactory evidence of identification, which were known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the foregoing instrument as his/her free act and deed.

[Signature] Notary Public  
Yanchun Wang (print name)  
My Commission expires 05/05/2017

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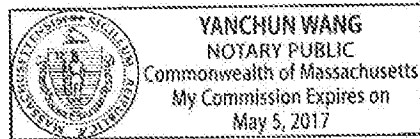
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Inventor: [Signature]  
XURI GAO

State/Commonwealth of Massachusetts  
County of Middlesex



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(SEAL) [Signature] Notary Public  
Yanchun Wang (print name)  
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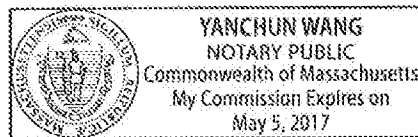
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WHEREAS, Enanta Pharmaceuticals, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 500 Arsenal Street, Watertown, MA 02472 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application and all divisionals, renewals, and continuations thereof, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon and all reissues and extensions thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property including, without limitation, all applications for patents, utility models and designs which may be filed for said invention in any countries foreign to the United States together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed as may be applicable; and all forms of industrial property protection including, without limitation, patents, utility models, inventor's certificates, and designs which may be granted for said invention in any country foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby covenant and agree that we have full right to convey the entire interest herein assigned and that we have not executed, and will not execute, any agreement in conflict herewith;

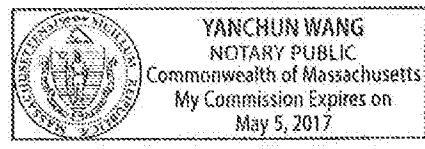
AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: [Signature]  
MEIZHONG JIN

State/Commonwealth of Massachusetts  
County of Middlesex



On this 14th day of May, 2016, before me, the undersigned notary public, personally appeared MEIZHONG JIN proved to me through satisfactory evidence of identification, which were known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the foregoing instrument as his/her free act and deed.

[Signature] Notary Public  
Yanchun Wang (print name)  
My Commission expires 05/05/2017

(SEAL)

ASSIGNMENT

WHEREAS, we, Yao-Ling Qiu, Hui Cao, Wei Li, Jordan Kass, Xuri Gao, Xiaowen Peng, Meizhong Jin and Yat Sun Or have invented a certain improvement in Hepatitis B Antiviral Agents described in an application for Letters Patent of the United States, the specification of which:

- is being executed on even date herewith and is about to be filed in the United States Patent Office;
- was filed on April 1, 2016 as Application No. 15/088,517;
- was patented under U.S. Patent No. [ ] on [ ].

WHEREAS, Enanta Pharmaceuticals, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 500 Arsenal Street, Watertown, MA 02472 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application and all divisionals, renewals, and continuations thereof, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon and all reissues and extensions thereof; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property including, without limitation, all applications for patents, utility models and designs which may be filed for said invention in any countries foreign to the United States together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed as may be applicable; and all forms of industrial property protection including, without limitation, patents, utility models, inventor's certificates, and designs which may be granted for said invention in any country foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby covenant and agree that we have full right to convey the entire interest herein assigned and that we have not executed, and will not execute, any agreement in conflict herewith;

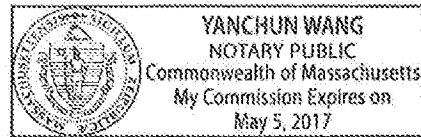
AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: [Signature]  
YAT-SUN OR

State/Commonwealth of Massachusetts  
County of Middlesex



On this 4<sup>th</sup> day of May, 2016, before me, the undersigned notary public, personally appeared YAT SUN OR proved to me through satisfactory evidence of identification, which were known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the foregoing instrument as his/her free act and deed.

(SEAL) [Signature] Notary Public  
Yanchun Wang (print name)  
My Commission expires 05/05/2017