

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Markus Grompe</td><td>03/05/2009</td></tr><tr><td>Hisaya Azuma</td><td>06/11/2008</td></tr><tr><td>Muhsen Al-Dhalimy</td><td>03/19/2009</td></tr></tbody></table>		Name	Execution Date	Markus Grompe	03/05/2009	Hisaya Azuma	06/11/2008	Muhsen Al-Dhalimy	03/19/2009				
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RECEIVING PARTY DATA													
<table border="1"><tr><td>Name:</td><td>Oregon Health &amp; Science University</td></tr><tr><td>Street Address:</td><td>2525 SW First Avenue</td></tr><tr><td>Internal Address:</td><td>Suite 120</td></tr><tr><td>City:</td><td>Portland</td></tr><tr><td>State/Country:</td><td>OREGON</td></tr><tr><td>Postal Code:</td><td>97201</td></tr></table>		Name:	Oregon Health & Science University	Street Address:	2525 SW First Avenue	Internal Address:	Suite 120	City:	Portland	State/Country:	OREGON	Postal Code:	97201
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PROPERTY NUMBERS Total: 2													
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>60933432</td></tr><tr><td>PCT Number:</td><td>US0865937</td></tr></tbody></table>		Property Type	Number	Application Number:	60933432	PCT Number:	US0865937						
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Application Number:	60933432												
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CORRESPONDENCE DATA													
Fax Number: (503)595-5301 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
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Address Line 2: Suite 1600													
Address Line 4: Portland, OREGON 97204													
ATTORNEY DOCKET NUMBER:	899-77961-02												
NAME OF SUBMITTER:	Jodi L. Connolly, Ph.D.												

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PATENT

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**Total Attachments: 6**

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## ASSIGNMENT

WHEREAS, we, Markus Grompe, of Portland, Oregon, Hisaya Azuma, of Portland, Oregon, and Muhsen Al-Dhalimy of Beaverton, Oregon, along with Mark A. Kay, have invented a certain invention, entitled METHOD OF EXPANDING HUMAN HEPATOCYTES IN VIVO, for which the following applications have been filed:

U.S. Provisional Application No. 60/933,432, filed June 5, 2007  
PCT Patent Application No. PCT/US2008/65937, filed June 5, 2008

WHEREAS, OREGON HEALTH & SCIENCE UNIVERSITY, a organization organized under the laws of the State of Oregon, having a place of business at 2525 SW First Avenue, Suite #120, Portland, Oregon 97201, desires to acquire an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, Markus Grompe, Hisaya Azuma, and Muhsen Al-Dhalimy, hereby sell, assign and transfer to OREGON HEALTH & SCIENCE UNIVERSITY the full and exclusive right, title and interest in and to said invention, patent application and patent rights throughout the world, including foreign patent priority rights, the right to file and prosecute International Applications under the Patent Cooperation Treaty, and the right to file and prosecute applications under the European Patent Convention; said invention, application and letters patent in this or any foreign country, and all divisions, continuations, reissues and extensions thereof, to be held and enjoyed by OREGON HEALTH & SCIENCE UNIVERSITY, for its own use and benefit, and for its successors and assigns to the full end of the term for which letters patent may be granted in this or any foreign country, as fully and entirely as the same would have been held by us had this

assignment and sale not been made, and covenant that we have full right so to do, and agree that we will communicate to OREGON HEALTH & SCIENCE UNIVERSITY, or its successors and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths, and do everything possible to aid OREGON HEALTH & SCIENCE UNIVERSITY, its successors and assigns to obtain and enforce proper patent protection for said invention in this or any foreign country.

We hereby grant the law firm of Klarquist Sparkman, LLP, the power to insert on this Assignment any further information which may be necessary or desirable in order to comply with all applicable legal requirements, including the rules of the United States Patent and Trademark Office, for submitting and recording this document.

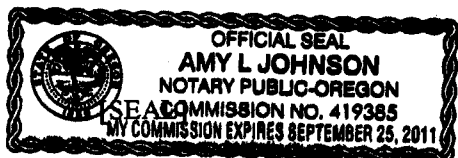
Executed at the place and date opposite our respective signatures below.

At Portland, OR  
(City and State)  
on this 5 day of March, 2008. 2009

Markus Grompe  
Markus Grompe

STATE OF Oregon )  
COUNTY OF Multnomah ) ss.

This 5<sup>th</sup> day of March, <sup>2009</sup>2008, before me personally came the above-named Markus Grompe, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Markus Grompe's own free will for the purpose set forth therein.



Amy L. Johnson  
Notary Public For State of Oregon  
My commission expires: 9-25-2011

Hisaya Azuma

At \_\_\_\_\_  
(City and State)  
on this \_\_\_\_ day of \_\_\_\_\_, 2008.

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

This \_\_\_\_ day of \_\_\_\_\_, 2008, before me personally came the above-named Hisaya Azuma, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Hisaya Azuma's own free will for the purpose set forth therein.

Notary Public For  
My commission expires:

[SEAL]

Muhsen Al-Dhalimy  
Muhsen Al-Dhalimy

At Portland, Oregon  
(City and State)  
on this 19<sup>th</sup> day of March, 2008.

STATE OF Oregon )  
COUNTY OF Multnomah ) ss.

This 19<sup>th</sup> day of March, 2008, before me personally came the above-named Muhsen Al-Dhalimy, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Muhsen Al-Dhalimy's own free will for the purpose set forth therein.



[SEAL]

Michele Gunness  
Notary Public For State of Oregon  
My commission expires: June 25, 2011

## ASSIGNMENT

WHEREAS, we, Markus Grompe, of Portland, Oregon, Hisaya Azuma, of Portland, Oregon, and Muhsen Al-Dhalimy of Beaverton, Oregon, along with Mark A. Kay, have invented a certain invention, entitled METHOD OF EXPANDING HUMAN HEPATOCYTES IN VIVO, for which the following applications have been filed:

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WHEREAS, OREGON HEALTH & SCIENCE UNIVERSITY, a organization organized under the laws of the State of Oregon, having a place of business at 2525 SW First Avenue, Suite #120, Portland, Oregon 97201, desires to acquire an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, Markus Grompe, Hisaya Azuma, and Muhsen Al-Dhalimy, hereby sell, assign and transfer to OREGON HEALTH & SCIENCE UNIVERSITY the full and exclusive right, title and interest in and to said invention, patent application and patent rights throughout the world, including foreign patent priority rights, the right to file and prosecute International Applications under the Patent Cooperation Treaty, and the right to file and prosecute applications under the European Patent Convention; said invention, application and letters patent in this or any foreign country, and all divisions, continuations, reissues and extensions thereof, to be held and enjoyed by OREGON HEALTH & SCIENCE UNIVERSITY, for its own use and benefit, and for its successors and assigns to the full end of the term for which letters patent may be granted in this or any foreign country, as fully and entirely as the same would have been held by us had this

assignment and sale not been made, and covenant that we have full right so to do, and agree that we will communicate to OREGON HEALTH & SCIENCE UNIVERSITY, or its successors and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths, and do everything possible to aid OREGON HEALTH & SCIENCE UNIVERSITY, its successors and assigns to obtain and enforce proper patent protection for said invention in this or any foreign country.

We hereby grant the law firm of Klarquist Sparkman, LLP, the power to insert on this Assignment any further information which may be necessary or desirable in order to comply with all applicable legal requirements, including the rules of the United States Patent and Trademark Office, for submitting and recording this document.

Executed at the place and date opposite our respective signatures below.

At \_\_\_\_\_  
(City and State)  
on this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

\_\_\_\_\_  
Markus Grompe

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

This \_\_\_\_ day of \_\_\_\_\_, 2008, before me personally came the above-named Markus Grompe, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Markus Grompe's own free will for the purpose set forth therein.

\_\_\_\_\_  
Notary Public For  
My commission expires:

[SEAL]

Hisaya Azuma  
Hisaya Azuma

At Tokyo, Japan  
(City and State)  
on this 11 day of June, 2008.

STATE OF )  
COUNTY OF ) ss.

This 11 day of June, 2008, before me personally came the above-named Hisaya Azuma, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Hisaya Azuma's own free will for the purpose set forth therein.

\_\_\_\_\_  
Notary Public For  
My commission expires:

[SEAL]

\_\_\_\_\_  
Muhsen Al-Dhalimy

At \_\_\_\_\_  
(City and State)  
on this \_\_\_\_ day of \_\_\_\_\_, 2008.

STATE OF )  
COUNTY OF ) ss.

This \_\_\_\_ day of \_\_\_\_\_, 2008, before me personally came the above-named Muhsen Al-Dhalimy, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Muhsen Al-Dhalimy's own free will for the purpose set forth therein.

\_\_\_\_\_  
Notary Public For  
My commission expires:

[SEAL]