

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>Joseph C. Glorioso III</td> <td>11/06/2012</td> </tr> <tr> <td>Justus B. Cohen</td> <td>11/06/2012</td> </tr> <tr> <td>Hiroaki Uchida</td> <td>11/07/2012</td> </tr> </tbody> </table>		Name	Execution Date	Joseph C. Glorioso III	11/06/2012	Justus B. Cohen	11/06/2012	Hiroaki Uchida	11/07/2012		
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<table border="1"> <tr> <td>Name:</td> <td>University of Pittsburgh - Of the Commonwealth System of Higher Education</td> </tr> <tr> <td>Street Address:</td> <td>200 Gardner Steel Conference Center</td> </tr> <tr> <td>City:</td> <td>Pittsburgh</td> </tr> <tr> <td>State/Country:</td> <td>PENNSYLVANIA</td> </tr> <tr> <td>Postal Code:</td> <td>15260</td> </tr> </table>		Name:	University of Pittsburgh - Of the Commonwealth System of Higher Education	Street Address:	200 Gardner Steel Conference Center	City:	Pittsburgh	State/Country:	PENNSYLVANIA	Postal Code:	15260
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CORRESPONDENCE DATA											
Fax Number:	3126165700										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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ATTORNEY DOCKET NUMBER:	711235										
NAME OF SUBMITTER:	M. Daniel Hefner										
<p>Total Attachments: 6 source=711235-Assignment-Executed 11-7-12#page1.tif</p>											

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PATENT
Attorney Docket No. 711235
Client Reference No. 02144

Leydig, Voit & Mayer, Ltd.
Two Prudential Plaza
Suite 4900
Chicago, Illinois 60601-6731

ASSIGNMENT

WHEREAS, WE, Joseph C. Glorioso III; Hiroaki Uchida; and Justus B. Cohen, of 5220 5th Ave. Pittsburgh, PA 15232; 2-8-5 Mejirodai, Apt. #304, Hachioji-Shi, Japan 193-0833; and 2824 Shamrock Drive, Allison Park, PA 15101, respectively, have invented and own a certain invention entitled:

IDENTIFICATION OF MUTATIONS IN HERPES SIMPLEX VIRUS ENVELOPE GLYCOPROTEINS THAT ENABLE OR ENHANCE VECTOR RETARGETING TO NOVEL NON-HSV RECEPTORS

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on October 16, 2012, under U.S. Application No. 13/641,649, and

WHEREAS, University of Pittsburgh - Of the Commonwealth System of Higher Education, of 200 Gardner Steel Conference Center, Pittsburgh, PA 15260, hereinafter referred to as Assignee, is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

NOW, THEREFORE, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive rights in and to the invention in the U.S. and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

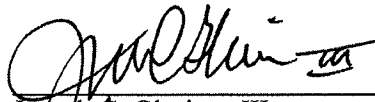
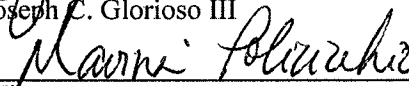

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

UPON SAID CONSIDERATION, we convey to the Assignee the right to make application in its own behalf for protection of the invention in the U.S. and countries foreign to the U.S. and to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of the U.S. application (or any other application on the invention) to gain priority with respect to other applications.

In re Appln. of Glorioso et al.
Attorney Docket No. 711235

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

Date <u>Nov 6 2012</u>	 _____ Joseph C. Glorioso III
Date <u>11/6/12</u>	 _____ Witness
Date <u>11/6/12</u>	 _____ Witness

Date _____	_____ Hiroaki Uchida
Date _____	_____ Witness
Date _____	_____ Witness

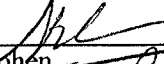
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Date 11/6/2012

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Assignment Appln Joint-Witness (Revised 5/10/2010)



Justus B. Cohen



Witness



Witness

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Tokyo
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Date _____
Joseph C. Glorioso III

Date _____
Witness

Date _____
Witness

=====
Date 11/07/2012 Hiroaki Uchida
Hiroaki Uchida

Date 11/07/2012 Takeshi Fukuhara
Witness Takeshi FUKUHARA

Date 11/07/2012 Yu Okubo
Witness Yu Okubo
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