

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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>Mikiro HAYASHI</td> <td>07/23/2012</td> </tr> <tr> <td>Kazuhiko TABATA</td> <td>07/31/2012</td> </tr> <tr> <td>Yoshiyuki YONETANI</td> <td>08/20/2012</td> </tr> </tbody> </table>		Name	Execution Date	Mikiro HAYASHI	07/23/2012	Kazuhiko TABATA	07/31/2012	Yoshiyuki YONETANI	08/20/2012		
Name	Execution Date										
Mikiro HAYASHI	07/23/2012										
Kazuhiko TABATA	07/31/2012										
Yoshiyuki YONETANI	08/20/2012										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Kyowa Hakko Bio Co., Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>1-6-1, Ohtemachi, Chiyoda-ku</td> </tr> <tr> <td>City:</td> <td>Tokyo</td> </tr> <tr> <td>State/Country:</td> <td>JAPAN</td> </tr> <tr> <td>Postal Code:</td> <td>100-8185</td> </tr> </table>		Name:	Kyowa Hakko Bio Co., Ltd.	Street Address:	1-6-1, Ohtemachi, Chiyoda-ku	City:	Tokyo	State/Country:	JAPAN	Postal Code:	100-8185
Name:	Kyowa Hakko Bio Co., Ltd.										
Street Address:	1-6-1, Ohtemachi, Chiyoda-ku										
City:	Tokyo										
State/Country:	JAPAN										
Postal Code:	100-8185										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13520947</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13520947						
Property Type	Number										
Application Number:	13520947										
CORRESPONDENCE DATA											
<p>Fax Number: 3126165700</p> <p>Phone: (312) 616-5600</p> <p>Email: assignments@leydig.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: John Kilyk, Jr.</p> <p>Address Line 1: Leydig, Voit & Mayer, Ltd.</p> <p>Address Line 2: Two Prudential Plaza, Suite 4900</p> <p>Address Line 4: Chicago, ILLINOIS 60601-6731</p>											
ATTORNEY DOCKET NUMBER:	710691										
NAME OF SUBMITTER:	John Kilyk, Jr.										
<p>Total Attachments: 3</p> <p>source=Assignment#page1.tif</p> <p>source=Assignment#page2.tif</p> <p>source=Assignment#page3.tif</p>											

CH \$40.00 13520947

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

ASSIGNMENT

WHEREAS, WE,

Mikiro HAYASHI of c/o Bioprocess Development Center, KYOWA HAKKO BIO CO., LTD.,
2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841 Japan, Kazuhiko TABATA of 10960 Ashton
Avenue 405 Los Angeles CA 90024 USA and Yoshiyuki YONETANI of c/o Head Office,
KYOWA HAKKO BIO CO., LTD., 1-6-1, Ohtemachi, Chiyoda-ku, Tokyo 100-8185 Japan

respectively, have invented and own a certain invention entitled:

PROCESS FOR PRODUCTION OF L-GLUTAMINE OR L-GLUTAMIC
ACID

for which invention we have executed an application (provisional or non-provisional) for a United States patent, which was filed on July 6, 2012, under Application No. 13/520,947,
and

WHEREAS, KYOWA HAKKO BIO CO., LTD. of 1-6-1, Ohtemachi, Chiyoda-ku, Tokyo
100-8185 Japan (hereinafter referred to as Assignee), is desirous of acquiring the entire 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 United States 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, and reexaminations) that may be filed in the United States on the invention, and the patents or extensions thereof that may issue thereon, and we do hereby authorize and request the Commissioner for Patents to issue United States 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.

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, or reexamined patents of the United States 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 July 23, 2012

M. Hayashi
Mikiro HAYASHI

Date July 23, 2012

T. Ujihara
Witness Tetsuro UJIHARA

Date July 23, 2012

M. Nagano
Witness Megumi NAGANO

Date July 31, 2012

K. Tabata
Kazuhiko TABATA

Date July 31, 2012

P. Lin
Witness Po-heng Lin

Date July 31, 2012

H. Park
Witness Hannah Park

In re Appln. of Hayashi et al.
Attorney Docket No. 710691

Date Aug 20 2012

Yoshiyuki Yonetani
Yoshiyuki YONETANI

Date August 20, 2012

Hirofumi Endo
Witness Hirofumi ENDO

Date August 20, 2012

Akihiro Senco
Witness Akihiro SENCO

=====