

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3017865

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
BIO-ENERGY CORPORATION	08/26/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	KANSAI CHEMICAL ENGINEERING CO., LTD.
<b>Street Address:</b>	9-7, MINAMINANAMATSUCHO 2-CHOME
<b>City:</b>	AMAGASAKI-SHI, HYOGO
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	660-0053
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12294376
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(412)945-5933
<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>	412-471-8815
<b>Email:</b>	assignments@webblaw.com
<b>Correspondent Name:</b>	KENT E. BALDAUF, THE WEBB LAW FIRM, P.C.
<b>Address Line 1:</b>	ONE GATEWAY CENTER
<b>Address Line 2:</b>	420 FT. DUQUESNE BLVD, SUITE 1200
<b>Address Line 4:</b>	PITTSBURGH, PENNSYLVANIA 15222
<b>ATTORNEY DOCKET NUMBER:</b>	3274-082820
<b>NAME OF SUBMITTER:</b>	KENT E. BALDAUF
<b>SIGNATURE:</b>	/kent e baldauf/
<b>DATE SIGNED:</b>	09/11/2014
<b>Total Attachments: 10</b>	
source=recordingwithassignment#page1.tif	
source=recordingwithassignment#page2.tif	
source=recordingwithassignment#page3.tif	
source=recordingwithassignment#page4.tif	
source=recordingwithassignment#page5.tif	
source=recordingwithassignment#page6.tif	

PATENT

source=recordingwithassignment#page7.tif  
source=recordingwithassignment#page8.tif  
source=recordingwithassignment#page9.tif  
source=recordingwithassignment#page10.tif

### RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)**  
BIO-ENERGY CORPORATION

Additional name(s) of conveying party(ies) attached?  Yes  No

**2. Name and address of receiving party(ies)**  
Name: KANSAI CHEMICAL ENGINEERING CO., LTD.  
Internal Address: 9-7, Minaminanamatsucho 2-chome

Street Address: Amagasaki-shi, Hyogo 660-0053

City: \_\_\_\_\_  
State: \_\_\_\_\_  
Country: JAPAN Zip: \_\_\_\_\_

Additional name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance/Execution Date(s):**  
Execution Date(s) August 26, 2014

Assignment  Merger  
 Security Agreement  Change of Name  
 Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other \_\_\_\_\_

**4. Application or patent number(s):**  This document is being filed together with a new application.  
A. Patent Application No.(s)  
12/294,376

B. Patent No.(s)

Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**  
Name: Kent E. Baldauf  
Internal Address: The Webb Law Firm

Street Address: One Gateway Center  
420 Ft. Duquesne Blvd., Ste 1200  
City: Pittsburgh  
State: PA Zip: 15222  
Phone Number: 412-471-8815  
Fax Number: 412-945-5933  
Email Address: assignments@webblaw.com

**6. Total number of applications and patents involved:** 1

**7. Total fee (37 CFR 1.21(h) & 3.41) \$** 0

Authorized to be charged by credit card  
 Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**8. Payment Information**

a. Credit Card Last 4 Numbers 1916  
Expiration Date 05/2015

b. Deposit Account Number 23-0650  
Authorized User Name \_\_\_\_\_

**9. Signature:** *Kent E. Baldauf* September 11, 2014  
Signature Date

Kent E. Baldauf  
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 10

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

**ASSIGNMENT**

WHEREAS, **BIO-ENERGY CORPORATION**, a corporation of Japan, located at **9-7, Minaminanamatsucho 2-chome, Amagasaki-shi, Hyogo 660-0053, Japan** (hereinafter called "Assignor"), is a joint owner, by assignment (Reel/Frame 021581/0018), along with **OSAKA UNIVERSITY**, an academic institution of Japan, located at **1-1, Yamadaoka, Suita-shi, Osaka 565-0871, Japan**, of United States Patent Application Serial No. 12/294,376 filed September 24, 2008, entitled "Method for Separation of Lactic Acid Component from Lactic Acid Fermentation Liquor, and Separation Apparatus"; and

WHEREAS, **KANSAI CHEMICAL ENGINEERING CO., LTD.**, a corporation of Japan, having a place of business at **9-7, Minaminanamatsucho 2-chome, Amagasaki-shi, Hyogo 660-0053 JAPAN**, (hereinafter called "Assignee"), are desirous of acquiring part of **BIO-ENERGY CORPORATION's** right, title and interest in and to said United States Patent Application Serial No. 12/294,376 and the invention covered thereby.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, joint Assignor, **BIO-ENERGY CORPORATION**, has sold, assigned, transferred and set over, and does hereby sell, assign, transfer and set over to joint Assignee **KANSAI CHEMICAL ENGINEERING CO., LTD.**'s part interest in United States Patent Application Serial No. 12/294,376 and any continuations, divisionals and reissues thereof, and the inventions covered thereby, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives, to the end of the term for which any patent may be granted or reissued as fully and entirely as the same would have been held and enjoyed by assignor, if this assignment and sale had not been made; together with all claims for damages by reason of past infringement of any such patent, with the right to sue for and collect the same for its own use and enjoyment, and for use and enjoyment of its successors, assigns or other legal representatives.

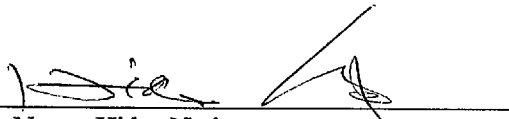
AND, Assignor hereby authorizes and requests the United States Commissioner of Patents and Trademarks to record this Assignment of the part interest, and hereby covenants that it has full right to convey its interest herein assigned, and that it has not executed, and will not execute, any agreements inconsistent therewith.

A copy of the original Assignment and Notice of Recordation is attached hereto.

IN TESTIMONY WHEREOF, Assignor has caused this Assignment to be executed effective the 26th day of August, 2014.

**BIO-ENERGY CORPORATION**

By



Name: Hideo Noda  
Title: President

Witness: Eigou Suyama

TO: KENT E. BALDAUF COMPANY: KOPPERS BUILDING

**UNITED STATES PATENT AND TRADEMARK OFFICE**UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 24, 2008

\*500656873A\*

PTAS

KENT E. BALDAUF  
700 KOPPERS BUILDING  
436 SEVENTH AVENUE  
PITTSBURGH, PA 15219UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 09/24/2008

REEL/FRAME: 021581/0018  
NUMBER OF PAGES: 4BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).  
DOCKET NUMBER: 3274-082820

## ASSIGNOR:

UYAMA, HIROSHI

DOC DATE: 09/20/2008

## ASSIGNOR:

NODA, HIDEO

DOC DATE: 09/17/2008

## ASSIGNOR:

TERADA, TAKAHIKO

DOC DATE: 09/22/2008

## ASSIGNEE:

BIO-ENERGY CORPORATION  
9-7, MINAMINANAMATSUCHO 2-CHOME,  
AMAGASAKI-SHI  
HYOGO, JAPAN 660-0053

TO: KENT E. BALDAUF COMPANY: KOPPERS BUILDING

021581/0018 PAGE 2

## ASSIGNEE:

OSAKA UNIVERSITY  
1-1, YAMADAOKA, SUITA-SHI  
OSAKA, JAPAN 565-0871

SERIAL NUMBER: 12294376

FILING DATE:

PATENT NUMBER:

ISSUE DATE:

TITLE: METHOD FOR SEPARATION OF LACTIC ACID COMPONENT FROM LACTIC ACID  
FERMENTATION LIQUOR, AND SEPARATION APPARATUS

ASSIGNMENT SERVICES BRANCH  
PUBLIC RECORDS DIVISION

TO: KENT E. BALDAUF COMPANY: KOPPERS BUILDING

## PATENT ASSIGNMENT

Electronic Version v1.1  
Stylesheet Version v1.109/24/2008  
500656873

SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
<b>CONVEYING PARTY DATA</b>									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Hiroshi Uyama</td> <td>09/20/2008</td> </tr> <tr> <td>Hideo Noda</td> <td>09/17/2008</td> </tr> <tr> <td>Takahiko Terada</td> <td>09/22/2008</td> </tr> </tbody> </table>		Name	Execution Date	Hiroshi Uyama	09/20/2008	Hideo Noda	09/17/2008	Takahiko Terada	09/22/2008
Name	Execution Date								
Hiroshi Uyama	09/20/2008								
Hideo Noda	09/17/2008								
Takahiko Terada	09/22/2008								
<b>RECEIVING PARTY DATA</b>									
Name:	Bio-energy Corporation								
Street Address:	9-7, Minaminanamatsucho 2-chome, Amagasaki-shi								
City:	Hyogo								
State/Country:	JAPAN								
Postal Code:	660-0053								
Name:	Osaka University								
Street Address:	1-1, Yamadaoka, Suita-shi								
City:	Osaka								
State/Country:	JAPAN								
Postal Code:	565-0871								
<b>PROPERTY NUMBERS Total: 1</b>									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12294376</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12294376				
Property Type	Number								
Application Number:	12294376								
<b>CORRESPONDENCE DATA</b>									
Fax Number:	(412)471-4094								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
Phone:	412-471-8815								
Email:	webblaw@webblaw.com								
Correspondent Name:	Kent E. Baldauf								
Address Line 1:	700 KOPPERS BUILDING								
Address Line 2:	436 SEVENTH AVENUE								

OP \$40.00 12294376



TO: KENT E. BALDAUF COMPANY: KOPPERS BUILDING

Address Line 4: PITTSBURGH, PENNSYLVANIA 15219	
ATTORNEY DOCKET NUMBER:	3274-082820
NAME OF SUBMITTER:	Kent E. Baldauf
Total Attachments: 2 source=RECCOVER#page1.tif source=ASSIGN#page1.tif	

<b>PATENT ASSIGNMENT</b>
--------------------------

Electronic Version v1.1

Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT								
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT								
<b>CONVEYING PARTY DATA</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Hiroshi Uyama</td> <td>09/20/2008</td> </tr> <tr> <td>Hideo Noda</td> <td>09/17/2008</td> </tr> <tr> <td>Takahiko Terada</td> <td>09/22/2008</td> </tr> </tbody> </table>		Name	Execution Date	Hiroshi Uyama	09/20/2008	Hideo Noda	09/17/2008	Takahiko Terada	09/22/2008
Name	Execution Date								
Hiroshi Uyama	09/20/2008								
Hideo Noda	09/17/2008								
Takahiko Terada	09/22/2008								
<b>RECEIVING PARTY DATA</b>									
<b>Name:</b>	Bio-energy Corporation								
<b>Street Address:</b>	9-7, Minaminanamatsucho 2-chome, Amagasaki-shi								
<b>City:</b>	Hyogo								
<b>State/Country:</b>	JAPAN								
<b>Postal Code:</b>	660-0053								
<b>Name:</b>	Osaka University								
<b>Street Address:</b>	1-1, Yamadaoka, Suita-shi								
<b>City:</b>	Osaka								
<b>State/Country:</b>	JAPAN								
<b>Postal Code:</b>	565-0871								
<b>PROPERTY NUMBERS Total: 1</b>									
<b>Property Type</b>	<b>Number</b>								
<b>Application Number:</b>	12294376								

PATENT

REEL: 033717 FRAME: 0394

**CORRESPONDENCE DATA****Fax Number:** (412)471-4094*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.***Phone:** 412-471-8815**Email:** webblaw@webblaw.com**Correspondent Name:** Kent E. Baldauf**Address Line 1:** 700 KOPPERS BUILDING**Address Line 2:** 436 SEVENTH AVENUE**Address Line 4:** PITTSBURGH, PENNSYLVANIA 15219**ATTORNEY DOCKET NUMBER:**

3274-082820

**NAME OF SUBMITTER:**

Kent E. Baldauf

**Signature:**

/kent e baldauf/

**Date:**

09/24/2008

**Total Attachments: 2**

source=RECCOVER#page1.tif

source=ASSIGN#page1.tif

**RECEIPT INFORMATION****EPAS ID:** PAT671301**Receipt Date:** 09/24/2008**Fee Amount:** \$40

**ASSIGNMENT**

WHEREAS, WE, Hiroshi UYAMA residing in Osaka, Japan, Hideo NODA, and Takahiko TERADA both residing in Hyogo, Japan, have invented certain new and useful improvements in the invention entitled "Method for Separation of Lactic Acid Component from Lactic Acid Fermentation Liquor, and Separation Apparatus" for which we have this day executed an application for United States Letters Patent as initiation of the national phase of International Application No. PCT/JP2007/055165, filed March 8, 2007;

AND, WHEREAS Bio-energy Corporation, a corporation of Japan, having a place of business at 9-7, Minaminanamatsucho 2-chome, Amagasaki-shi, Hyogo 660-0053 JAPAN, and Osaka University a corporation of Japan, having a place of business at 1-1, Yamadaoka, Suita-shi, Osaka 565-0871 JAPAN hereinafter called the "assignee", is desirous of acquiring the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed.

NOW, THEREFORE, for good and valuable consideration paid to us by said assignee, the receipt of which is hereby acknowledged, we do hereby assign, sell, transfer, and set over unto said assignee the entire right, title and interest in and to said application and the inventions and improvements therein disclosed for the United States and all foreign countries and any Letters Patent which may issue therefor in the United States and all foreign countries and all divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, said assignee to have and to hold the interests herein assigned to the full ends of the terms of said Letters Patent and any and all divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by us had this assignment not been made.

The Commissioner for Patents is requested to issue such Letters Patent in accordance herewith. We covenant that we are the lawful owners of the said application, inventions, and improvements, that the same are unencumbered, that no license has been granted to make, use, or vend the said inventions or improvements or any of them, and that we have the full right to make this assignment.

And for the consideration aforesaid, we agree jointly and individually that we will communicate to said assignee or the representatives thereof any facts known to us respecting said inventions and improvements, and will, upon request, but without expense to us, testify in any legal proceedings, sign all lawful papers, execute all divisional, reissue, continuation, continuation-in-part, renewal, and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts, deemed necessary or expedient by said assignee or by counsel for said assignee, to assist or enable said assignee to obtain and enforce full benefits from the rights and interests herein assigned. This assignment shall be binding upon our heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said assignee.

Date 20, 09, 2008

Inventor Hiroshi UYAMA  
Hiroshi UYAMA

Date 17, 09, 2008

Inventor Hideo NODA  
Hideo NODA

Date 22, 09, 2008

Inventor Takahiko TERADA  
Takahiko TERADA