PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mr. Ka-Yiu San	10/10/2005
Mr. George N. Bennett	10/10/2005
Ms. Ailen Sanchez	10/29/2005

RECEIVING PARTY DATA

Name:	Rice University	
Street Address:	6100 Main Street	
City:	Houston	
State/Country:	TEXAS	
Postal Code:	77005	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11214309

CORRESPONDENCE DATA

Fax Number: (713)427-5099

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

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Email: susan.b.jensen@bakernet.com

Correspondent Name: Tamsen Valoir, Ph.D.

Address Line 1: 711 Louisiana, Ste. 3400

Address Line 4: Houston, TEXAS 77002

ATTORNEY DOCKET NUMBER: 31175413-011002

NAME OF SUBMITTER: Tamsen Valoir, Ph.D.

Total Attachments: 3 source=int101#page1.tif source=int101#page2.tif

PATENT REEL: 016742 FRAME: 0618

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PATENT REEL: 016742 FRAME: 0619

ASSIGNMENT OF APPLICATION	Docket Number (Optional)			
ACCIGNIFICATION	31175413-011002			
Whereas, I/We, Ka-Yiu San of Hous	ton Texas			
hereafter referred to as applicant, have invented certain new and useful improven				
Thereafter referred to as applicant, have invented certain new and userul improven	ierits iii			
Aerobic Succinate Production in Bacteria				
for which a application for a United States Patent was filed on Application Number				
for which an application for a United States Patent was executed on	, and			
Whereas, Rice University of	here			
referred to as "assignee" whose mailing address is 6100 Main Street; Houston,	Texas 77005-1892			
is desirous of acquiring the entire right, title and interest in the same;				
Now, therefore, in consideration of the sum of dollars (\$1 acknowledged, and other good and valuable consideration, !/We, the application of the sum of dollars (\$1 acknowledged, and other good and valuable consideration, !/We, the application of the sum of dollars (\$1 acknowledged, and other good and valuable consideration, !/We, the application of the sum of dollars (\$1 acknowledged, and other good and valuable consideration).	.00), the receipt whereof is			
assign and transfer unto said assignee the full and exclusive right to the said inve	ntion in the United States and the			
entire rights, title and interest in and to any and all Patents which may be gran	ted therefor in the United States,			
I/We hereby authorize and request the Director of the U.S. Patent and Trade States Patent to said assignee, of the entire right, title, and interest in and to	the same, for his sole use and			
behoof; and for the use and behoof of his legal representatives, to the full end	of the term for which said Patent			
may be granted, as fully and entirely as the same would have been held by me been made.	had this assignment and sale not			
Executed this 10th day of 00tober at Houston, Texas	, 2005 ,			
at Houston, Texas				
Const	1			
- Gly in	(Signature)			
	(Signature)			
State of <u>exas</u>) SS:				
County of Harris				
Before me personally appeared said Ka-Yiu San				
and acknowledged the foregoing instrument to be his free act and deed this				
day of October, 2005.				
Seal Printer Printer	ma()0 e x			
DRIUGEI C. SMAILEV	lotary Public)			
My Commission Expires				
NOTE: Signature or esciences of report of the entire interest or their representative(s) are required. Submit				
multiple forms if more than one signature is required, see below*.				
x *Total of 3 forms are submitted.				

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ASSIGNMENT OF APPLICATION	Docket Number (Optional)			
ACCIGNMENT OF ALL EIGHTON	31175413-011002			
Whereas, I/We, George N. Bennett of Houston, TX ,				
hereafter referred to as applicant, have invented certain new and useful improvements in				
Aerobic Succinate Production in Bacteria				
x for which an application for a United States Patent was filed on August 29, 2005 Application Number 11/214,309				
for which an application for a United States Patent was executed on	, and			
Whereas, Rice University of	here			
referred to as "assignee" whose mailing address is 6100 Main Street; Houston,	Texas 77005-1892			
is desirous of acquiring the entire right, title and interest in the same; Now, therefore, in consideration of the sum of dollars (\$1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I/We, the applicant(s), by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire rights, title and interest in and to any and all Patents which may be granted therefor in the United States, I/We hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue said United				
States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.				
executed this 10th day of October , 2005 , at Houston, Texas				
Serge 1	enith			
	(Signature)			
State of <u>Texas</u>) SS: County of <u>Harris</u>)				
Before me personally appeared said George N. Bennett				
and acknowledged the foregoing instrument to be his free act and deed this day of OCHODE , 2005				
April 19, 2009	lotary Public)			
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.				
x *Total of 3 forms are submitted.				

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ASSIGNMENT OF APPLICATION	Docket Number (Optional)		
ASSIGNMENT OF AFFEIGATION	31175413-011002		
Whereas, I/We, Ailen Sanchez of Hou	ıston, TX		
hereafter referred to as applicant, have invented certain new and useful improven	nents in		
Aerobic Succinate Production in Bacteria			
X for which an application for a United States Patent was filed on Application Number 11/214.309	August 29, 2005		
for which an application for a United States Patent was executed on	, and		
Whereas, Rice University of	here		
referred to as "assignee" whose mailing address is 6100 Main Street; Houston,			
is desirous of acquiring the entire right, title and interest in the same;			
Now, therefore, in consideration of the sum of <u>one</u> dollars (\$ <u>1</u> acknowledged, and other good and valuable consideration, I/We, the applican	.00), the receipt whereof is		
assign and transfer unto said assignee the full and exclusive right to the said inve	nt(s), by these presents do sell, ntion in the United States and the		
entire rights, title and interest in and to any and all Patents which may be grant	ted therefor in the United States.		
I/We hereby authorize and request the Director of the U.S. Patent and Tradel States Patent to said assignee, of the entire right, title, and interest in and to	nark Office to issue said United		
behoof; and for the use and behoof of his legal representatives, to the full end	of the term for which said Patent		
may be granted, as fully and entirely as the same would have been held by me	had this assignment and sale not		
been made.			
Executed this 29th day ofOctabev , \tag{5} ,			
at foster city California.			
- 100 or			
to anche:			
	(Signature)		
State of Calefornia) SS:			
County of Say Mates)			
Before me personally appeared said Ailen Sanc	hez		
and acknowledged the foregoing instrument to be the free act and deed the	is 29th		
day of October, 7005. The			
JOSE J. SAN GABRIEL			
Seal Notary Public - California	Kurhull		
San Mateo County (N	otaly Public)		
My Comm. Expires Jul 28, 2007			
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their re	presentative(s) are required. Submit		
multiple forms if more than one signature is required, see below*.			
x *Total of 3 forms are submitted.			
ionis are submitted.			

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RECORDED: 11/07/2005