09-17-1999	

Form PTO-1592 (modified) 1011:	2923600295.75997	
To the Honorable Commissioner of Patents and Trademarks: Please rece	ord the attached original documents or copies thereof:	
 Name of Conveying Party or Parties: Robert E. BRIGGS Fred M. TATUM Additional Names of conveying party or parties attached? Yes ■ No 	 2. Name and address of receiving party or parties: O United States of America Secretary of Agriculture Washington, DC 	
3. Nature of Conveyance: 1-33-99		
 Assignment Merger Security Agreement Change of Name Other <u>Correction of Assignment Cover Sheet with original</u> <u>Date of Filing of January 22, 1999, for this Assignment</u> <u>Document</u> Execution Date: <u>December 16, 1998</u> 	Additional Name(s) and address(es) attached? Biochemistry Research and Development Corporation 1815 N. University Street Peoria, IL 61604	
4. Application Number(s) or Patent Number(s):		
If this document is being filed together with a new application, the execution date of the application is:		
A. Patent Application Number(s): 09/160,340	B. Patent Number(s):	
Additional Name(s) and address(es) attached? Yes No		
 5. Name and address of party to whom correspondence concerning the document should be mailed: Sarah A. Kagan, Esq. BANNER & WITCOFF, LTD. 11th Floor 1001 G Street, N.W. Washington, D.C. 20001-4597 	 6. Total Number of Applications and patents involved: 1 7. Total fee (37 CFR 3.41) \$ 40.00 Previously Paid (Jan. 22, 1999) Authorized to be charged to deposit account Please charge or credit our deposit account for any additional or refunded fees associated with recording this assignment 8. Deposit Account No.: 19-0733 (in the event additional fees are required) 	
	(Duplicate copy of this page attached if paying by deposit account)	
9. Statement and Signature:	is true and correct and any attached copy is a true copy of the original	

PATENT REEL: 010096 FRAME: 0080

	01-27-1999
U.S. PATENT AND TRADEM	MARK OFFICE - BOX
	& Witcoff, LTD. 100951402 CORDATION FORM COVER SHEET Docket No. 00295.75997
To the Honorable Commissioner of Patents and Trademark, Box Please record the attached original documents or copy thereof.	
 Name of conveying party(ies): Robert E. BRIGGS Fred M. TATUM JAN 2 2 1999 JAN 2 2 1999 JAN 2 2 1999 JAN 2 2 1999 JAN 2 1999 JAN 2 2 1997 JAN 2 1997 JAN	 2. Name and address of receiving party(ies): United States of America and Name: <u>Biochemistry Research and Development Corporation</u> Street Address: <u>1815 N. University Street</u> City: <u>Peoria</u>_State: <u>IL</u>_Zip: <u>61604</u>
Execution Date: <u>12/16/98</u>	Additional name(s) & address(es) attached? X No
 4. Application number(s) or patent number(s): If this document is being filed together with a new application A. Patent Application No.(s) Serial No. 09/160,340 	n, the execution date of the application is: B. Patent No.(s)
Additional number	s attached: <u>Yes X</u> No
 Name and address of party to whom correspondence concerning document should be mailed: 	6. Total number of applications and patents involved: 1
Name: <u>Sarah A. Kagan, Esq</u> .	
Internal Address: Banner & Witcoff, 11th Floor	7. Total fees (37 CFR 3.41): <u>\$40.00</u>
Street Address: 1001 G Street, N.W.	X Enclosed
City: <u>Washington</u> State: <u>D.C.</u> Zip: <u>20001-4597</u>	Authorized to be charged to deposit account
	8. Deposit account number: 19-0733
01/26/1999 DNGUYEN 00000131 09160340	(Attach duplicate comy of this many if a price has been side as such
01 FC:581	(Attach duplicate copy of this page if paying by deposit account) USE THIS SPACE
DO NOT	40E
9. Statement and signature	
To the best of my knowledge and belief, the foregoing inform original document.	mation is true and correct and any attached copy is a true copy of the
Sarah A. Kagan. Reg No. 32.141 Name of Person Signing Signature	Litage 1/20/99 Date
Total number of pages including co	over sheet, attachments and document: <u>3</u>

PATENT REEL: 010096 FRAME: 0081

ASSIGNMENT

WHEREAS, WE, Robert E. Briggs, citizen of the United States of America, residing at 1071 X Avenue, Boone, Iowa 50036; and Fred M. Tatum, citizen of the United States of America, residing at Rural Route 2, Box 225F1, Ames, Iowa 50010, have invented certain new and useful improvements in *LKTA* DELETION MUTANT OF *P. HAEMOLYTICA* for which an application for Letters Patent of the United States was filed September 25, 1998, and accorded Serial No. 09/160,340; and

WHEREAS, the United States of America and Biotechnology Research and Development Corporation of Peoria, Illinois, which is incorporated in the State of Delaware, is desirous of acquiring our entire right, title and interest in and to the aforesaid invention and in and to any Letters Patent of the United States or any foreign country which may be granted therefor;

NOW THEREFORE, in consideration of these premises, we, the said Robert E. Briggs and Fred M. Tatum, hereby assign, and transfer unto the United States of America as represented by the Secretary of Agriculture, its successors, legal representatives and assigns, and Biotechnology Research and Development Corporation, its successors, legal representatives and assigns, our full and exclusive right to the said invention as described in the said application, and our entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations and extensions thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks or any other proper officer or agency of any country to issue all said Letters Patent to said assignees;

AND WE HEREBY warrant and covenant that we have full right to convey our entire interest herein assigned and that we have not executed and will not execute any instrument or assignment in conflict herewith;

AND WE HEREBY agree to communicate to said assignces or their representatives any facts known to us respecting said invention, to execute all divisional, continuation, reissue and foreign applications, sign all lawful documents and make all rightful oaths relating to said invention, and to testify in any judicial or administrative proceeding and generally do everything possible to aid the said assignces to obtain and enforce said Letters Patent in the United States or any foreign country when requested so to do by said assignces.

IN WITNESS WHEREOF, we have hereunto set our hand and seal.

Date: <u>Dec /6, 1998</u> Inventor: <u>Kaber</u> Robert E. Brigg Robert E. Briggs Date: <u>16 D cc 1993</u> Inventor: ____ Fride T Fred M. Tatum

STATE OF IOWA) ss STORY 1 COUNTY OF

On this <u>1074</u> day of <u>DECEMBER</u>, 1998, before me a Notary Public in and for the County and State aforesaid, personally appeared Robert E. Briggs and Fred M. Tatum to me known and known to me to be the persons of those names, who signed and sealed the foregoing instrument, and acknowledged the same to be their free act and deed.

(SEAL) .

Notary Public

My Commission Expires: 2/28/00

2

Patent/Design	🗆 PATENT 🗆 DESIGN
HAND CARRY Group/Section _	Bldg Rm
Serial No. 09/160,340 B&W # 00045754 Inventor BAIDOS et al	<u>197</u> Atty/Sec SHUQUMG Date [] F.2. 94 Glient BRDC
THE LKTA Deletion Mutant.	
	t and Trademark Office on the date stamped hereon:
total pp Spec., including : # of Claims	Claim for Priority w/Priority Doc Country, Appl. # and Date
(# of independent claims);	Petition for Extension til
Foreign Priority on	CPA Request w/Ext of Time : OA dtd Notice of Appeal & Fee Brief : Appeal & Fee Request for Oral Hearing Issue Fee : Allowance dtd Advance Patent Copies : # ordered Check # for \$

.

.