PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Frances H. Arnold	07/23/2008
Michael M. Chen	07/23/2008
Yuuichi Mitsuda	01/05/2009
Jared Crawford Lewis	07/23/2008
Sabine Bastian	07/23/2008

RECEIVING PARTY DATA

Name:	The California Institute of Technology	
Street Address:	1200 East California Blvd., MS 201/85	
City:	Pasadena	
State/Country:	CALIFORNIA	
Postal Code:	91125	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12141348

CORRESPONDENCE DATA

Fax Number: (858)458-9986

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

Phone: (858) 458-3607

Email: elena.lopez@bbiplaw.com

Correspondent Name: Joseph R. Baker, Jr.

Address Line 1: 4660 La Jolla Village Drive, Suite 750 Address Line 4: San Diego, CALIFORNIA 92122

ATTORNEY DOCKET NUMBER:	00016-003001

NAME OF SUBMITTER: Joseph R. Baker, Jr.

PATENT REEL: 022289 FRAME: 0490

500786807

DP \$40.00 12141

Total Attachments: 2 source=00016-003001-Assignment-CIT#page1.tif source=00016-003001-Assignment-CIT#page2.tif

PATENT REEL: 022289 FRAME: 0491

ASSIGNMENT

THIS ASSIGNMENT, by Frances H. Arnold, residing at 4341 Encinas Drive, La Canada, California 91011, United States of America; Michael M. Chen, residing at 430 S. Catalina Avenue, Pasadena, California 91106, United States of America; Yuuichi Mitsuda, residing at 8-17-106 Tateishi-cho, Ikeda, Osaka, 563-0053, Japan; Jared Crawford Lewis, residing at 81 Virginia Avenue, Pasadena, California 91107, United States of America; and Sabine Bastian, residing at Joseph-Haydn-Str. 22, 66125 Saarbruecken, Germany (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in

and foodly in an amplication fool attack Detact of the United St.

METHODS AND COMPOSITIONS FOR PREPARATION OF SELECTIVELY PROTECTED CARBOHYDRATES

set fort	n in a	an app	ication for Letters Patent of the United States, which is a	
(1)		provisional application		
	(a)		bearing Application No, and filed on;	
	(b)		to be filed herewith; or	
(2)	\boxtimes	non-p	provisional application	
	(a)	\boxtimes	bearing Application No. 12/141,348, and filed on June 18, 2008;	
	(b)		having an oath or declaration executed on even date herewith prior to filing of application;	
	(c)		having an oath or declaration executed on a different date than this Assignment; and	

Whereas, The California Institute of Technology, a corporation having a principal place of business at 1200 East California Blvd., MS 201/85 Pasadena, California United States of America (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefore and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth:

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Gavrilovich, Dodd & Lindsey LLP to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

DATE 7/23/08

DATE 7/23/08

DATE 1/5/09

DATE 7/23/08

DATE 7/03/08

RECORDED: 02/20/2009

Frances H. Arnold

Michael M. Chen

uichi Mitsuda

Gared Crawford Lewis

Sabíne Bastian