PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:	ASSIGNMENT			

CONVEYING PARTY DATA

Name	Execution Date
Takeshi YAMAMOTO	08/24/2009
Yoshimitsu TAKAKURA	08/24/2009
Toshiki MINE	08/24/2009
Yoko HAMADA	08/24/2009
Hitomi KAJIWARA	08/24/2009
Masako ICHIKAWA	08/24/2009
Hiroshi TSUKAMOTO	08/24/2009

RECEIVING PARTY DATA

Name:	JAPAN TOBACCO INC.		
Street Address:	2-1, Toranomon 2-chome, Minato-ku		
City:	Tokyo		
State/Country:	JAPAN		
Postal Code:	105-8422		

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	12529496	

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ATTORNEY DOCKET NUMBER: 0230-0281PUS1

PATENT

REEL: 023190 FRAME: 0168

NAME OF SUBMITTER:	Gerald M. Murphy, Jr.			
Total Attachments: 3 source=assignment#page1.tif source=assignment#page2.tif source=assignment#page3.tif				

PATENT REEL: 023190 FRAME: 0169

BIRCH, STEWART, KOLASCH & BIRCH, LLP

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

12/529**,**496

	Application No Filed _	9/1/09			
Insert Name(s) of Inventor(s)	WHEREAS, Takeshi YAMAMOTO, Yoshimitsu TAKAKU	JRA,			
	Toshiki MINE, Yoko HAMADA, Hitomi KAJIWARA, Masako ICHIKAWA and Hiroshi TSUKAMOTO				
	Masako 1011110111 and 11110siii 150 KAWO10				
	(hereinafter designated as the undersigned) has (have) invented certain new and useful in A NOVEL β -GALACTOSIDE- α 2,6-SIALYLTRANSFERASE, A GENE ENCOI				
Insert Title of Invention	AND A METHOD FOR ENHANCING ENZYME ACTIVITY	JING THEREOF,			
	for which an application for Letters Patent of the United States of America has been undersigned (except in the case of a provisional application).	en executed by the			
Insert Date of Signing of Application	on August 24, 2009	;	and		
Insert Name of Assignee	WHEREAS, JAPAN TOBACCO INC.				
Insert Address of Assignee	of 2-1, Toranomon 2-chome, Minato-ku, Tokyo 105-8422 Japa	in			
C HECK BOX F APPROPRIATE	its heirs, successors, legal representatives and assigns (hercinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and in any foreign countries.				
	NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the underst the receipt of which is hereby acknowledged, and other good and valuable consideration has (have) sold, assigned and transferred, and by these presents does sell, assign and Assignee the full and exclusive right to the said invention in the United States of Amedependencies and possessions and the entire right, title and interest in and to any and a which may be granted therefor in the United States of America, its territories, possessions, and if the box above is designated, in any and all foreign countries;	on, the undersigned transfer unto said erica, its territories, all Letters Patent(s)			
	and to any and all divisions, reissues, continuations, conversions and extensions thereof terms for which the same may be granted.	for the full term or			

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The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree (s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date _	August	24,	2009	Name of Inventor (skieslie fortweren)	
Date _	August	24,	2009 ,	(signature) Takeshi YMMAMOTO Name of Inventor Ivahimthu Takukeura	
1				(signature) Yoshimitsu TAKAKURA	_
Date _	August	24,	2009	Name of Inventor (signature) Toshiki MINE	
Date _	August	24,	2009,	Name of Inventor Yoko Hamada	
Duta	A110119+	24	2009	(signature) Yoko HAMADA Name of Inventor (Signature) Yoko HAMADA	
Date _	ziagus c	<u>. 7 9</u>		(signature) Hitomi KAJIWARA	
Date _	August	24,	2009 ,	Name of Inventor Masaka Ochikawa	_
				(signature) Masako ICHIKAWA	

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April 2000

DateAugust 24, 2009,	Name of Inventor	(signature)	Hiroshi TSUKAMOTO
Date,			
Date,	Name of Inventor	(signature)	
Date,	Name of Inventor	(signature)	
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RECORDED: 09/03/2009