

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	Dongmei Xu	05/05/2016
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	U.S. SMOKELESS TOBACCO COMPANY LLC	
<b>Street Address:</b>	6603 WEST BROAD STREET	
<b>City:</b>	RICHMOND	
<b>State/Country:</b>	VIRGINIA	
<b>Postal Code:</b>	23230	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	15136624
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(877)769-7945	
<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>	(612) 335-5070	
<b>Email:</b>	apsi@fr.com	
<b>Correspondent Name:</b>	M. ANGELA PARSONS	
<b>Address Line 1:</b>	FISH & RICHARDSON P.C.	
<b>Address Line 2:</b>	P.O.BOX 1022	
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55440-1022	
<b>ATTORNEY DOCKET NUMBER:</b>	20210-0455001	
<b>NAME OF SUBMITTER:</b>	JILL A. WRIGHT	
<b>SIGNATURE:</b>	/Jill A. Wright/	
<b>DATE SIGNED:</b>	05/11/2016	
<b>Total Attachments: 2</b>		
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# ASSIGNMENT

For valuable consideration, the receipt of which I acknowledge, and intending to be bound legally, I, DONGMEI XU, assign to U.S. SMOKELESS TOBACCO COMPANY LLC, a corporation formed under the laws of Virginia and having a principal place of business at 6603 West Broad Street, Richmond, Virginia 23230, and its successors, transferees, and assignees (collectively the "Assignee"), all of my right, title, and interest throughout the world in the subject matter (the "Subject Matter") of a patent application that names me as inventor, is titled "TOBACCO NICOTINE DEMETHYLASE GENOMIC CLONE AND USES THEREOF," and was filed in the United States Patent and Trademark Office on April 22, 2016, as application 15/136,624 (the "Application").

This Assignment assigns (a) the Application and all other applications that may be made for, and all patents, utility models, design registrations, and other rights of exclusion and inventors' certificates for, any of the Subject Matter (collectively the "Applications and Granted Rights") in every country or region, (b) the right to claim priority based on and the benefit of the filing date of any of the Applications and Granted Rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other applicable treaties or conventions, and (c) the right to pursue, collect, and retain in the Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment.

I authorize the Assignee to apply for and pursue protection for any or all of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment in all countries, regions, and territories of the world, in my name or in the Assignee's name.

I represent and warrant that I have the right and power to make this Assignment and that I have not made and will not make any other assignment that conflicts with this Assignment.

I will communicate to the Assignee (or at the request of the Assignee to other parties) all known facts in any form relating to the Subject Matter, will execute and provide all oaths and declarations, statements, testimony, assignments, powers of attorney, applications, and documents, and will perform all other lawful acts necessary or desirable to secure fully to the Assignee the rights, titles, and interests assigned by this Assignment.

Dongmei Xu  
Dongmei Xu

Date: May, 5, 2016

Witnessed by:

Signature: Dianne S. Watkins Date: 5.5.16

Print Name: Dianne S. Watkins

Signature: Kenneth Lilly Date: May 5, 2016

Print Name: Kenneth Lilly

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