

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Kazuharu KOGA	10/08/2010
Shingo MASUDA	10/08/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	JAPAN TOBACCO INC.
<b>Street Address:</b>	2-1, Toranomom 2-chome, Minato-ku
<b>City:</b>	Tokyo
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	105-8422
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12949991
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(703)205-8050
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	7032058000
<b>Email:</b>	ply@bskb.com
<b>Correspondent Name:</b>	Birch, Stewart, Kolasch, & Birch, LLP
<b>Address Line 1:</b>	P.O. Box 747
<b>Address Line 4:</b>	Falls Church, VIRGINIA 22040-0747
<b>ATTORNEY DOCKET NUMBER:</b>	1254-0457PUS1
<b>NAME OF SUBMITTER:</b>	Gerald M. Murphy, Jr.
<b>Total Attachments: 2</b> source=2010_11_22_Assignment_1254_0457PUS1#page1.tif source=2010_11_22_Assignment_1254_0457PUS1#page2.tif	

CH \$40.00 12949991

Attorney's Docket No.: 1254-0457PUS1**Assignment of Application**

WHEREAS, I (WE) \_\_\_\_\_

**Kazuharu KOGA and Shingo MASUDA** of \_\_\_\_\_both c/o Japan Tobacco Inc., 1-17-7, Yokokawa, Sumida-ku, Tokyo 130-8603 Japan  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_, respectively,

have invented certain new and useful improvements in: BACTERIA THAT  
REDUCE CONTENT OF HEAVY METALS IN PLANT  
\_\_\_\_\_for which an application for Letters Patent was executed on October 8, 2010(Application No. 12/949,991, filed November 19, 2010), andWHEREAS, **JAPAN TOBACCO INC.** \_\_\_\_\_

(hereinafter referred to as "ASSIGNEE") having a place of business at: \_\_\_\_\_

2-1, Toranomom 2-chome, Minato-ku, Tokyo 105-8422 Japan

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), 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 its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefore 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, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any official of any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its legal representatives and assigns covenant and any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letter Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of BIRCH, STEWART, KOLASCH & BIRCH, LLP of 8110 Gatehouse Road, Suite 100 East, Falls Church, Virginia 22042-1248 U.S.A. the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: Oct. 8, 2010      Kazuharu KOGA  
(Signature of inventor) Kazuharu KOGA

Date: Oct. 8, 2010      Shingo MASUDA  
(Signature of inventor) Shingo MASUDA