

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Alec J. Hayes	12/10/2008
Chengalrayan Kudithipudi	12/10/2008
Rutger S. van der Hoeven	12/10/2008

RECEIVING PARTY DATA

Name:	Philip Morris USA Inc.
Street Address:	6601 West Broad Street
City:	Richmond
State/Country:	VIRGINIA
Postal Code:	23230

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12333681

CORRESPONDENCE DATA

Fax Number: (703)836-2021

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

Phone: 703-836-6620

Email: ADIPFDD@bipc.com

Correspondent Name: BUCHANAN, INGERSOLL & ROONEY PC

Address Line 1: POST OFFICE BOX 1404

Address Line 4: ALEXANDRIA, VIRGINIA 22313-1404

ATTORNEY DOCKET NUMBER:

1021238-000933

NAME OF SUBMITTER:

Peter K. Skiff

Total Attachments: 4

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PATENT

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ASSIGNMENT  
(JOINT)

THIS ASSIGNMENT, by 1) Alec J. Hayes, 2) Chengalrayan Kudithipudi and 3) Rutger S. van der Hoeven (hereinafter referred to as "the Assignors"), residing at 1) 11006 Brandy Oaks Blvd., Chesterfield, VA 23832, 2) 15201 Tomahawk Meadows Lane, Midlothian, VA 23112 and 3) 1413 Camberly Court, Midlothian, VA 23113, respectively, witnesseth:

WHEREAS, the Assignors have made certain new and useful inventions in TRANSGENIC PLANTS MODIFIED FOR REDUCED CADMIUM TRANSPORT, DERIVATIVE PRODUCTS, AND RELATED METHODS set forth in an application for Letters Patent of the United States of America, [ ] having an oath or declaration executed on even date herewith; [ ] bearing Serial No. 12/333,661, and filed on 12/12/2008; and

WHEREAS, PHILIP MORRIS USA INC., a corporation duly organized under and pursuant to the laws of the State of Virginia and having an office and place of business at 6601 West Broad Street, Richmond, VA 23230, is desirous of acquiring the entire right, title, and interest in and to the inventions for the United States and the application for Letters Patent of the United States, and in and to any United States Letters Patent or Patents, to be obtained therefor and thereon; and

WHEREAS, PHILIP MORRIS PRODUCTS S.A. (formerly known as Fabriques de Tabac Reunies S.A.), a corporation organized and existing under the laws of Switzerland and having an office and place of business at Quai Jeanrenaud 3, CH-2000, Neuchâtel, Switzerland, is desirous of acquiring the entire right, title, and interest in and to the inventions for countries foreign to the United States, and in and to any foreign patent applications, and in and to any foreign Letters Patent or Patents to be obtained therefor and thereon; and

NOW, THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) to each of us paid and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged:

ASSIGNMENT OF  
UNITED STATES PATENT RIGHTS

We do hereby sell, assign and transfer unto PHILIP MORRIS USA INC., its successors, assigns and legal representatives, all right, title, and interest in and to the inventions, for the United States, and in and to the United States patent application, including any continuations and divisions thereof, and any substitute applications therefor and any United States patents which may issue thereon and any reissues and extensions of the same; and we hereby authorize and request the Commissioner of Patents to grant and issue any and all patents on the inventions in the United States to PHILIP MORRIS USA INC. as the assignee thereof.

## ASSIGNMENT OF FOREIGN PATENT RIGHTS

Further in view of the consideration hereinabove referred to, we do hereby sell, assign, and transfer unto PHILIP MORRIS PRODUCTS S.A., its successors, assigns and legal representatives, all right, title and interest in and to the inventions for all countries foreign to the United States, including the right to claim priority under the International Convention based on the United States patent application, and in and to any foreign patent application, including renewals, revivals, continuations and divisions thereof, and any substitute applications therefor, and any foreign patents which may issue thereon, and any reissues and extensions of the same; and we hereby authorize and request competent authorities to grant and issue any and all patents on the inventions in any foreign country to PHILIP MORRIS PRODUCTS S.A. as the assignee thereof.

We further agree to execute upon request of the assignee PHILIP MORRIS USA INC. such additional documents, if any, as are necessary and proper to secure patent protection on the inventions in the United States, and to execute upon request of assignee PHILIP MORRIS PRODUCTS S.A. such additional documents, if any, as are necessary and proper to secure patent protection on the inventions in countries foreign to the United States, and to otherwise give full effect to and perfect the rights of the assignee PHILIP MORRIS USA INC. in the United States and of assignee PHILIP MORRIS PRODUCTS S.A. in countries foreign to the United States.

AND for the same consideration, the Assignors hereby covenant and agree to and with the assignees, their 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 and any and all applications for Letters Patent 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 assignees, their successors, legal representatives, and assigns, that the Assignors will, whenever counsel of the assignees, or counsel of their successors, legal representatives, and assigns, shall advise that any proceeding in connection with the inventions or any and all applications for Letters Patent, or any proceeding in connection with Letters Patent for the inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation, or continuation-in-part of any application for Letters Patent, or any reissue or extension of any Letters Patent 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 for the inventions, without charge to the assignees, their successors, legal representatives, and assigns, but at the cost and expense of the assignees, their successors, legal representatives, and assigns;

IN TESTIMONY THEREOF, we have hereunto signed our names on the dates hereinafter indicated:

Date 12-10-08

Name of Assignor

Alec J. Hayes  
Alec J. Hayes

STATE OF VIRGINIA )

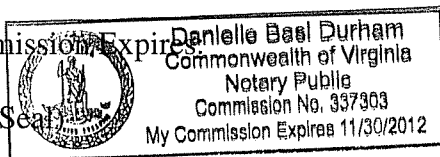
: ss

CITY OF RICHMOND )

On this 10 day of December, 2008, appeared before me in person the above-named individual, and acknowledged the above to be his signature and that he signed, sealed and delivered the above instrument as his voluntary act and deed, and for the uses and purposes therein set forth.

My Commission Expires

(Notarial Seal)



Danielle Basl Durham  
NOTARY PUBLIC

Date 12/10/08

Name of Assignor

Chengalrayan Kudithipudi  
Chengalrayan Kudithipudi

STATE OF VIRGINIA )

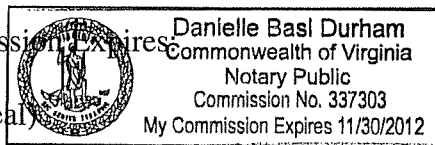
: ss

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My Commission Expires

(Notarial Seal)



Danielle Basl Durham  
NOTARY PUBLIC

Date

12/10/2008

Name of Assignor

  
Rutger S. van der Hoeven

STATE OF VIRGINIA )

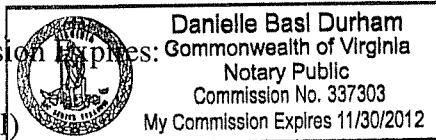
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NOTARY PUBLIC