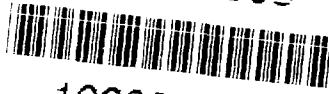


FORM PTO-1595  
(Rev. 6/93)



03-13-2003



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U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

T

Attorney's Docket No. 021238-561

To the Honorable Commissioner of Patents and Trademarks, Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Ping Li and Mohammad Hajalilog

3-7-03

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name

Other: \_\_\_\_\_

Execution Date: 02/24/03 (both)

2. Name and address of receiving party(ies):

Name: PHILIP MORRIS USA INC.

Address: 120 Park Avenue

New York, New York 10017

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

10/286,968

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Peter K. Skiff

Address: BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404

Alexandria, Virginia 22313-1404

6. Total number of applications and patents involved: ONE

7. Total fee (37 CFR § 3.41): \$ 40.00

☐ Enclosed

☒ Authorized to be charged to deposit account, if necessary

8. Deposit account number:

02-4800

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Peter K. Skiff  
Name of Person Signing

Peter K. Skiff  
Signature

March 7, 2003  
Date

Total number of pages including cover sheet, attachments, and document: 4

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks  
Box Assignments  
Washington, D.C. 20231

03/12/2003 6TOM11 00000074 024800 10286968

01 FC:8021 40.00 CH

PATENT  
REEL: 013825 FRAME: 0372

## ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by 1) Ping Li and 2) Mohammad Hajaligol (hereinafter referred to as "the Assignors"), residing at 1) 6267 Verdict Court, Chesterfield, VA 23832 and 2) 2902 Sweetaspire Ridge, Midlothian, VA 23112, respectively, witnesseth:

WHEREAS, the Assignors have made certain new and useful inventions in OXIDANT/CATALYST NANOPARTICLES TO REDUCE TOBACCO SMOKE CONSTITUENTS SUCH AS CARBON MONOXIDE set forth in an application for Letters Patent of the United States of America, [ ] having an oath or declaration executed on even date herewith; [X ] bearing Serial No. 10/286,968, and filed on November 4, 2002; 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 120 Park Avenue, New York, New York 10017, 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 INC., a corporation organized and existing under the laws of the State of Virginia and having an office and place of business at 3601 Commerce Road, Richmond, Virginia 23234, 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 INC., 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 INC. 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 INC. 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 INC. 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 02/24/03 Name of Assignor Ping Li  
Ping Li

STATE OF Virginia  
CITY OF Richmond : ss

On this 24<sup>th</sup> day of February, 2003, 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: 2/28/05 Francine E. Gargle  
NOTARY PUBLIC

(Notarial Seal)

Date 2/24/2003 Name of Assignor Mohammad Hajaligol  
Mohammad Hajaligol

STATE OF Virginia  
CITY OF Richmond : ss

On this 24<sup>th</sup> day of February, 2003, 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: 2/28/05 Francine E. Gargle  
NOTARY PUBLIC

(Notarial Seal)

(Notarial Seal)