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03-20-2001



U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

 $T\Xi$ 

| 3.13.01   | 341314   |
|---|--|
|   | Attorney's Docket No. <u>021238-402 (PM 1948)</u>                          |
|   | Please record the attached original documents or copy thereof.             |
| 1. Name of conveying party(ies):  | 2. Name and address of receiving party(ies):                               |
| (1) ARUN SINHA<br>(2) WENDY MARIN   | Name: PHILIP MORRIS INCORPORATED   |
| (3) BRENDAN ANDERSON  | Address: 120 PARK AVENUE   |
| (5) ROBERT PANDORF  | NEW YORK, NY 10017   |
| (6) JAMES COLLINS (7) CHARLES T. HIGGINS  |  |
| <ul><li>(8) WILLIAM JAMES CROWE</li><li>(9) TAKAHIDE TAKEDA</li></ul>                     |  |
| Additional name(s) of conveying party(ies) attached? [ ] Yes [X] No                       |  |
| 3. Nature of conveyance:  | Additional name(s) & address(es) attached? [ ] Yes [X] No                  |
| [X] Assignment [ ] Merger [ ] Change of Name  |  |
|   |  |
| Other:  |  |
| Execution Date: November 17, June 30, June 23, June 29, August 17, August 17, June 15,    |  |
| July 20, and August 25, 2000  |  |
| 4. Application number(s) or patent number(s):   |  |
| If this document is being filed together with a new application, the                      | e execution date of the application is:                                    |
| A. Patent Application No.(s)  | B. Patent No.(s)   |
| 29/120,630  |  |
| Additional numbers attac  | hed? [ ] Yes [X] No  |
| 5. Name and address of party to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: _1                   |
| Name: Peter K. Skiff  | 7. Total fee (37 CFR 3.41): \$40.00  |
| Address: Burns, Doane, Swecker & Mathis, L.L.P.   | [ ] Enclosed   |
| P.O. Box 1404   | [X] Authorized to be charged to deposit account, if necessary              |
| Alexandria, Virginia 22313-1404   | 8. Deposit account number:   |
|   | 02-4800  |
| DO NOT USE  | E 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. |
| Wendi L. Weinstein, Registration No. 34,456 Name of Person Signing                        | Narch 13, 2001 Date  |
|   | otal number of pages including cover sheet, attachments, and document: 11  |
| Mail documents to be recorded with  | h required cover sheet information to:                                     |
| //2001 910413 00000077 29120630 /Commissioner of Pa                                       | tents and Trademarks   |
| Box As  | signments<br>n, D.C. 20231   |

**PATENT** 

(09/99)

REEL: 011587 FRAME: 0414

| PM_1948              |  |
|----------------------|--|
| BDSM 021238-402      |  |
| Attorney Docket Nos. |  |

### **ASSIGNMENT**

(JOINT)

THIS ASSIGNMENT, by 1) Arun Sinha. 2) Wendy Marin. 3) Brendan Anderson. 4) Jan Jones, 5) Robert Pandorf, 6) James Collins, 7) Charles T. Higgins, 8) William James Crowe, and 9) Takahide Takeda, (hereinafter referred to as "the Assignors"), residing at 1) 143 Emery Drive East. Stamford, Connecticut 06902; 2) 56 Woodlawn Avenue, New Rochelle, New York 10804; 3) 200 East 89th Street, Apt. 17A, New York, New York 10128; 4) 14328 Regatta Pte. Hoad, Midlothian, Virginia 23112; 5) 231 Pascack Avenue, Emerson, New Jersey 07630; 6) 449 West 44th Street, Apt. 2E, New York, New York 10036; 7) 30 Glenbrooke Circle West, Richmond, Virginia 23229; 8) 11120 Chalkley Road, Chester, Virginia 23831; and 9) 2325-13 Shizuki, Tsuna-cho Tsuna-gun, Hyogo 656-2131, Japan, respectively, witnesseth:

WHEREAS, the Assignors have made certain new and useful inventions in <u>LIGHTER</u> 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. 29/120.630 , and filed on March 23, 2000 ; and

WHEREAS, PHILIP MORRIS INCORPORATED, 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 INCORPORATED, 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 INCORPORATED as the assignee thereof.

Page 1 of 5

PATENT REEL: 011587 FRAME: 0415

### 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 INCORPORATED 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 INCORPORATED 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 abovementioned, 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 TH   | IEREOF, we have hereui | nto signed our names o   | n the dates hereinafter |
|---|------------------------|--------------------------|-------------------------|
| indicated:  |                        | $(1) \cdot 1$            | 1                       |
| Date 11/17/070 N  | ame of Assignor        | (hr.m                    |                         |
| COMMECTICAL   | Ar                     | run SINHA                |                         |
| STATE OF VIRGINIA   |                        |                          |                         |
| : ss<br>CITY OF RICHMOND )  |                        |                          |                         |
| On this 17 day  | of November            | , 2000, appeared         | before me in person the |
| above-named individual, and ack delivered the above instrument as | nowledged the above to | be his signature and the |                         |
| My Commission Expires:  | Me                     | wilsun De                | esh.                    |
|   | NOTAR                  | Y PUBLIC                 |                         |
| (Notarial Seal)   | C                      |                          | •                       |
| MERRILYNN DUDECZ  | KA                     | V                        |                         |
| MOTARY DITRITO  |                        | ,                        |                         |

Page 2 of 5

MY COMMISSION EXPIRES 9/30/2003

PATENT REEL: 011587 FRAME: 0416

| Date  | Name of Assignor   |  |
|---|--|--|
|   |  | Wendy MARIN  |
| STATE OF VIRGINIA   |  |  |
| : ss  |  |  |
| CITY OF RICHMOND)   |  |  |
| On this<br>bove-named individual, an<br>elivered the above instrume | day of day of day of day of day of zero as his voluntary act | 2000, appeared before me in person the above to be his signature and that he signed, sealed and and deed, and for the uses and purposes therein set forth.   |
| ly Commission Expires:  |  |  |
|   |  | NOTARY PUBLIC  |
| Notarial Seal)  |  |  |
| )ate  | Name of Assignor   |  |
|   |  | Brendan ANDERSON   |
| TATE OF VIRGINIA )  |  |  |
| : 59  | ì  |  |
| ITY OF RICHMOND )   |  |  |
| My Commission Expires:  |  |  |
| NY COMMINSSION EXPRISS.   |  | NOTARY PUBLIC  |
| Notarial Seal)  |  |  |
|   |  |  |
| Date  | Name of Assignor   |  |
|   |  | Jan JONES  |
| STATE OF VIRGINIA   |  | •  |
| : ss  |  |  |
| CITY OF RICHMOND )  |  |  |
| On thisabove-named individual, and lelivered the above instrume     | day of   | , 2000, appeared before me in person the above to be his signature and that he signed, sealed and and deed, and for the uses and purposes therein set forth. |
| My Commission Expires:  |  | NOTARY PUBLIC  |
|   |  | TO THIS I DON'T  |
| (Notarial Seal)   |  |  |

Page 3 of 5

| Date  | Name of Assignor  |
|---|---|
| STATE OF VIRGINIA )   | Robert PANDORF  |
| : ss  |   |
| On thisabove-named individual, and lelivered the above instrume | day of  |
| My Commission Expires;  | NOTARY PUBLIC   |
| Notarial Seal)  | THE PARTY OBEIG   |
| Date  | Name of AssignorJames COLLINS   |
| STATE OF VIRGINIA )   | James Collino   |
| : ss  |   |
| On this   | day of, 2000, appeared before me in person the discknowledged the above to be his signature and that he signed, sealed and nt as his voluntary act and deed, and for the uses and purposes therein set forth. |
| My Commission Expires:  | NOTARY PUBLIC   |
| Notarial Seal)  |   |
| NOCATAL SEAL)   |   |
|   |   |
| Pate  | Name of Assignor  |
| STATE OF VIRGINIA )   | Charles T. HIGGINS  |
| : ss<br>CITY OF RICHMOND )                                      |   |
|   | day of, 2000, appeared before me in person the discknowledged the above to be his signature and that he signed, sealed and nt as his voluntary act and deed, and for the uses and purposes therein set forth. |
| My Commission Expires:  | NOTARY PUBLIC   |

(Notarial Seal)

| Date   | Name of Assignor   |  |
|--|--|--|
|  |  | William James CROWE  |
| STATE OF VIRGINIA )  |  |  |
| CITY OF RICHMOND )   |  |  |
| On thisabove-named individual, and delivered the above instrumen | day of   | 2000, appeared before me in person the above to be his signature and that he signed, sealed and and deed, and for the uses and purposes therein set forth. |
| My Commission Expires:   |  | NOTARY PUBLIC  |
| 16.1   |  | TO TARK I OWNED  |
| (Notarial Seal)  |  |  |
| Date   | Name of Assignor   | Takahide TAKEDA  |
| STATE OF VIRGINIA  |  | , 2020000 (10.0)   |
| : ss<br>CITY OF RICHMOND }                                       |  |  |
| On thisabove-named individual, and delivered the above instrumen | day of day of<br>acknowledged the a<br>at as his voluntary act | 2000, appeared before me in person the above to be his signature and that he signed, sealed and and deed, and for the uses and purposes therein set forth. |
| My Commission Expires:   |  |  |
| •  |  | NOTARY PUBLIC  |
| (Notarial Seal)  |  |  |

Page 5 of 5

PM 1948
BDSM 021238-402
Attorney Docket Nos.

#### **ASSIGNMENT**

(JOINT)

THIS ASSIGNMENT, by 1) Arun Sinha, 2) Wendy Marin, 3) Brendan Anderson, 4) Jan Jones, 5) Robert Pandorf, 6) James Collins, 7) Charles T. Higgins, 8) William James Crowe, and 9) Takahide Takeda, (hereinafter referred to as "the Assignors"), residing at 1) 143 Emery Drive East, Stamford, Connecticut 06902; 2) 56 Woodlawn Avenue, New Rochelle, New York 10804; 3) 200 East 89th Street, Apt. 17A, New York, New York 10128; 4) 14328 Regatta Pte. Road, Midlothian, Virginia 23112; 5) 231 Pascack Avenue, Emerson, New Jersey 07630; 6) 449 West 44th Street, Apt. 2E, New York, New York 10036; 7) 30 Glenbrooke Circle West, Richmond, Virginia 23229; 8) 11120 Chalkley Road, Chester, Virginia 23831; and 9) 2325-13 Shizuki, Tsuna-cho Tsuna-gun, Hyogo 656-2131, Japan, respectively, witnesseth:

WHEREAS, the Assignors have made certain new and useful inventions in <u>LIGHTER</u> 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. 29/120,630 , and filed on March 23, 2000 ; and

WHEREAS, PHILIP MORRIS INCORPORATED, 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 INCORPORATED, 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 INCORPORATED as the assignee thereof.

Page 1 of 5

PATENT

REEL: 011587 FRAME: 0420

## 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 INCORPORATED 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 INCORPORATED 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 abovementioned, 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 had indicated:  | ave hereunto signed our names on the dates hereinafter   |
|--|--|
| Date Name of Assigno   | orArun SINHA   |
| STATE OF VIRGINIA )  | Aluli Silvia   |
| : ss<br>CITY OF RICHMOND )   |  |
| On this day of above-named individual, and acknowledged the delivered the above instrument as his voluntary as | , 2000, appeared before me in person the above to be his signature and that he signed, sealed and and deed, and for the uses and purposes therein set forth. |
| My Commission Expires:   | NOTARY PUBLIC  |
| (Notarial Seal)  |  |

Page 2 of 5

| Date V 30/00 Name of Assignor Wendy MARIN  |
|--|
| STATE OF VIRGINIA )  CHT OF HICHMOND : ss  |
| On this 30 day of, 2000, 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: 6/30/01 Sandre 2. Allmond NOTARY PUBLIC   |
| (Notarial Seal)  |
| Date 6 Name of Assignor Bundan Anderson  |
| STATE OF VIRGINIA  : ss  CITY OF RICHMOND  The John day of Love 2000, 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 |
| 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: Hathles M. Mullian NOTARY PUBLIC  |
| KATHLEEN M. MULLIGAN (Notarial Spatiary Public, State of New York Qualified in Suffolk County Certificate Filed in New York County Reg. #4883282 Expires Jan. 20,  |
| Date Name of Assignor Jan JONES  |
| STATE OF VIRGINIA )  County of Handler: ss  CITY OF RICHMOND)  |
| On this 29th day of  |
| My Commission Expires: 6/30/2 Sandral 2. allmond NOTARY PUBLIC   |
| (Notarial Seal)  |

Page 3 of 5

REEL: 011587 FRAME: 0422

|  | MADA 1  |
|--|---|
| Date Name of Assignor  |   |
| STATE OF THOMAS ) JERGE 4  | Robert PANDORF  |
| CITY OF RICEMOND)  | , /   |
| above-named individual, and acknowledged the a                                     | bove to be his signature and that he signed, sealed and end deed, and for the uses and purposes therein set forth.  |
| My Commission Expires:   | NOTARY PUBLIC -   |
| (Notarial Seal)  | ROBBRT L. TUCHMAN<br>AN ATTORNEY AT LAW OF THE<br>STATE SENS. Y FORSEY  |
|  |   |
| Date 8.17.00 Name of Assignor  | Con Gra   |
| Date New Jersey STATE OF VINCHIA   | James COLLINS   |
| CITY OF RICHMOND OF P  |   |
| above-named individual, and acknowledged the a                                     | , 2000, appeared before me in person the boyesto be his signature and that he signed, sealed and and deed, and for the uses and purposes therein set forth. |
| My Commission Expires:   | NOTARY PUBLIC —   |
| (Notarial Seal)  | NOTARY PUBLIC TUCHMAN  WERT L. TUCHMAN  I ATTORNEY AT LAW OF THE  |
| S  | V ATTORNEY AT LAW OF THE  |
|  |   |
| Date 6/15/00 Name of Assignor  | Charles T. Higgins  |
| STATE OF VIRGINIA )  | Charles T. HIGGINS  |
| : ss<br>CITY OF RICHMOND )   |   |
| On this day of day of day of day of above-named individual, and acknowledged the a | , 2000, appeared before me in person the bove to be his signature and that he signed, sealed and and deed, and for the uses and purposes therein set forth. |
| My Commission Expires: 2/28/03   | Deresa J. Jims<br>NOTARY PUBLIC   |
| (Notarial Seal)  |   |

| Date   |  | William In m  |
|--|--|---|
|  | realine of Assignor _  | William James CROWE   |
| STATE OF VIR                                 | RGINIA )   | William Sames Chever  |
| STATE OF VIR<br>Swity Ha<br>CITY OF RICH     | INDIVEY: SS  |   |
| above-named<br>delivered the a               | On this 20th day of ulu<br>individual, and acknowledged the algebove instrument as his voluntary act a       | , 2000, appeared before me in person the ove to be his signature and that he signed, sealed and nd deed, and for the uses and purposes therein set forth. |
| My Commissio                                 | on Expires: $6/30/01$  | Sandra 2. allmond   |
| (Notarial Seal)                              |  |   |
| Date   | 8/25/00 Name of Assignor   | TAKAHIDE TAKEDA A COLETA  |
| STATE OF VIR<br>COUNTY 2/OF<br>CITY OF THICH | RGINIA )<br>MONEU : ss<br>IMOND )  |   |
| above-named<br>delivered the a               | On this 35th day of <u>Jugust</u> individual, and acknowledged the ababove instrument as his voluntary act a | , 2000, appeared before me in person the ove to be his signature and that he signed, sealed and nd deed, and for the uses and purposes therein set forth. |
| My Commissio                                 | on Expires: 6/30/2001  | Sandra 2. allmond   |
| (Notarial Seal)                              |  |   |

Page 5 of 5

RECORDED: 03/13/2001 REEL: 011587 FRAME: 0424