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Shahryar Rabiei, Firooz Rasouli Hajaligol	and Mahammad R.				
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A. Patent Application No.(s) 10/972,201		B. Patent N	lo.(s)		
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PATENT REEL: 015715 FRAME: 0740 PM 2144 BURNS, DOANE, SWECKER & MATHIS, L.L.P. Attorney Docket Nos. 021238-563

## ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by 1) Shahryar Rabiei, 2) Firooz Rasouli and 3) Mahammad R. Hajaligol (hereinafter referred to as "the Assignors"), residing at 1) 9206 D North Arch Village Court, Richmond, VA 23236, 2) 1807 Gildenborough Court, Midlothian, VA 23113 and 3) 5828 Spinnaker Cove Road, Midlothian, VA 23112, respectively, witnesseth:

WHEREAS, the Assignors have made certain new and useful inventions in TOBACCO CUT FILLER INCLUDING METAL OXIDE SUPPORTED PARTICLES 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. 10/972.201, and filed on October 25, 2004; 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 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.

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## 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;

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IN TESTIMONY THEREOF, we have hereunto signed our names on the dates hereinafter indicated:
Date 1/25/05 Name of Assignor Shahryar Rabier
STATE OF VIRGINIA )
CITY OF RICHMOND )
On this day of, 2005, 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: Wor, 30, 3007 NOTARY PUBLIC
(Notarial Seal)
Date 1/20/05 Name of Assignor Firooz Rasouli
STATE OF VIRGINIA ) : ss
CITY OF RICHMOND )
On this day of, 2005, 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: Nov. 30, 2007 Court Public
(Notarial Seal)
Date 2/1/2005 Name of Assignor Mohammad R. Hajaligol
STATE OF VIRGINIA )
: ss CITY OF RICHMOND )
On this day of the bruch, 2005, 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: 100,30,3007 NOTARY PUBLIC
(Notarial Seal)

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