(Rev. 6/93)	-01-2002 . DEPARTMENT Patent and 7	
To the Honorabic Correctioner of Patents and Trademarks.	Attorney's Docke	
1. Name of conveying party(ies): 3:26.02	2. Name and address of receiving party(ies	
Virginia Commonwealth University Intellectual Property	Name:PHILIP MORRIS INCORPO	
Foundation	Address:	
Additional name(s) of conveying party(ies) attached? [] Yes [X] No		
3. Nature of conveyance:	New York, New York 10017	
[X] Assignment[] Merger[] Security Agreement[] Change of Name		
Other:	Additional name(s) & address(es) attached? []	Yes [X] N
Execution Date: March 22, 2002		
5. Name and address of party to whom correspondence concerning	hed? [] Yes [X] No 6. Total number of applications and patents inv	olved: <u>ON</u>
document should be mailed:		
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 Alexandria, Virginia 22313-1404	[X] Authorized to be charged to deposit acco	ount, if nece
	8. Deposit account number: 02-4800	
DO NOT USF	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 $1 < 0$.	original docı
Peter K. Skiff Name of Person Signing	<u>Signature</u>	March 26, 20 Date
$\overline{\}$	Total number of pages including cover sheet, attachme	nts, and docu
Mail documents to be recorded with	n required cover sheet information to:	·
	tents and Trademarks	
Box Ass	, D.C. 20231	
Box Ass		

PATENT REEL: 012722 FRAME: 0238

PM 1901

BDSM 021238-330 Attorney Docket Nos.

ASSIGNMENT (SOLE)

WHEREAS, <u>Virginia Commonwealth University Intellectual Property Foundation</u>, a lawful, not-for profit entity by which Virginia Commonwealth University commercializes intellectual property organized under the laws of the Commonwealth of Virginia and having an office and place of business at <u>1101 East Marshall Street</u>, Richmond, Virginia 23298 (hereinafter referred to as "the Assignor"), is the owner of the entire right, title and interest in and to application for United States Letters Patent Application No. <u>09/778.043</u>, filed February 7, 2001, for FILTERING UNSATURATED HYDROCARBONS USING INTERMETALLIC NANO-CLUSTERS and of the invention therein described; 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.

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;

Page 2 of 3

	IN TEST	FIMONY THEREOF, Assignor herequito signed my name on the date hereinafter	
indicated:		\sim $(), M()$	
2	22	02 Name of Assignor Kelling Vana	
Date 3	XX I	Name of Assignor	
		Richard C. Franson, Ph.D.	
•	ı	President, VCU-Intellectual Property Foundation	

STATE OF VIRGINIA)

: ss CITY OF RICHMOND)

day of March

On this 27 day of MMM, 2002, 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:

Uhi z

My Commission Expires January 31, 2005

PATENT REEL: 012722 FRAME: 0241

RECORDED: 03/26/2002