Form **PTO-1595** (Rev. 09-08) OMB No. 0651-0027 (exp. 10/31/2008) U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY	
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.	
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Stanley R. Shanfield;	Name: Raytheon Company
Bharat Patel; Hermann Statz	Internal Address:
Additional name(s) of conveying party(ies) attached? Yes X No	· · · · · · · · · · · · · · · · · · ·
3. Nature of conveyance/Execution Date(s):	Street Address: 141 Spring Street
Execution Date(s) 12/17/1990; 12/17/1990; 12/18/1990	
Assignment Merger	
Security Agreement Change of Name	City: Lexington
Joint Research Agreement	State: Massachusetts
Government Interest Assignment	Country: USA Zip: 02173
Executive Order 9424, Confirmatory License	
Other Corrective Assignment (500676068)	Additional name(s) & address(es) attached? Yes X No
	document is being filed together with a new application.
A. Patent Application No.(s)	B. Patent No.(s)
	5,880,483
Additional numbers at	tached? Yes No
5. Name and address to whom correspondence	6. Total number of applications and patents
concerning document should be mailed:	involved: 1
Name: <u>Donald F. Mofford</u>	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00
Internal Address:	
	X Authorized to be charged to deposit account
Street Address: 870 Winter Street	Enclosed None required (government interest not affecting title)
City: Lexington	8. Payment Information
State: Massachusetts Zip: 02451-1449	
Phone Number: <u>(781) 522-6354</u>	Deposit Account Number <u>18-0550</u>
Fax Number: <u>(781) 522-6354</u>	·
Email Address: donald f_mofford@raytheon.com	Authorized User Name <u>Donald F. Mofford</u>
9. Signature: () km/ Stylls	7 22 Oct 2008
Signature	Date
Donald F. Mofford	Total number of pages including cover sheet, attachments, and documents:
Name of Person Signing	

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

10-22-08;12:28PM; :781 522 6466 # 13/ 16

<u>ASSIGNMENT</u>

WHEREAS, we, the signatories hereto, have invented an improvement entitled "Semiconductor Devices and Method of Manufacture" (Raytheon Case No. 35238) and have executed an application for United States patent based thereon on the date set forth below;

WHEREAS, RAYTHEON COMPANY, of Lexington, Massachusetts 02173, U.S.A., a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, U.S.A., is desirous of acquiring certain rights thereunder;

NOW, THEREFORE, for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, we have agreed to and do hereby sell, assign and transfer unto said corporation the entire right, title and interest, in and throughout the world, in and to said invention, said application and any and all patents (including extensions thereof) of any country, which have been or may be granted on said invention or any part thereof, or on said application or any divisional, continuing, substitute or reissue application based in whole thereon, or based upon said invention, and without limiting the generality of the foregoing, we also do hereby sell, assign and transfer unto said corporation all our rights under the International Convention and all other treaties of like purpose, in respect of said invention and application, and we authorize said corporation to apply for patents on said invention or any part thereof, in all countries, claiming the priority of the filing date of said application in the United States of America under the provisions of said International Convention or any such other treaty;

TO BE HELD AND ENJOYED by said corporation, its successors and assigns, to the full ends of the respective terms for which said patents or any of them have been or may be granted, as fully and entirely as the same would have been held and enjoyed by me had no sale, assignment or transfer of said right, title or interest been made;

AND we do hereby authorize and request the Commissioner of Patents of the United States of America and the corresponding Officer of each country foreign thereto to issue any and all United States and foreign patents which may be granted upon said applications or any of them in the United States and all other countries, or upon said invention or any part thereof, to said corporation, its successors or assigns;

AND we hereby agree for ourselves and for our heirs, executors and administrators, to execute without additional consideration any further lawful documents and any further assurances, and any applications for patents of any country, that might be deemed necessary by said corporation, its successors or assigns, fully to secure to said corporation, its successors or assigns, its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them, all, however, at the expense of said corporation, its successors or assigns.

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> PATENT REEL: 021709 FRAME: 0663

AND we do hereby covenant for ourselves and our legal representatives, and agree with said corporation, its successors and assigns, that we have granted no right or license to make, use or sell said invention to anyone except said corporation, that prior to the execution of this deed our right, title and interest in said invention had not been otherwise encumbered, and that we have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I Stanley R. Shanfield have hereunto set my hand and affixed my seal this

V17th day of December, 1990 Witalen

342 Otis Street

West Newton, MA 02165

ACKNOWLEDGMENT

On this 17th day of Accendent, 19 90, before me, a Notary Public within this state, personally appeared the above-named Stanley R. Shanfield, personally known by me to be the identified person named in and who executed the foregoing instrument, and subscribed the same in my presence, and acknowledged that he/she executed the same as his/her voluntary and free act and deed.

Notary Public //

My Commission Expires April 22, 1994

SEAT.

Raytheon Case No. 35238 APP-5A 8/23/90

IN WITNESS WHEREOF, I Bharat Patel have hereunto set my hand and affixed my seal this

U17 day of Darambes, 1990 6 Bland - Partel

12 Chatham Street

Nashua, NH 03063

ACKNOWLEDGMENT

County of Man Houch ss.

On this day of Accompany, 1970, before me, a Notary Public within this state, personally appeared the above-named Bharat Patel, personally known by me to be the identified person named in and who executed the foregoing instrument, and subscribed the same in my presence, and acknowledged that he/she executed the same as his/her voluntary and free act and deed.

Notary Public

My Commission Expires 2000 72,1594

// SEAL

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IN WITNESS WHEREOF, I $\underbrace{\text{Hermann Statz}}_{\text{have hereunto set my hand and}}$ affixed my seal this

18th day of Decomber, 1990

1 muchel

10 Barney Hill Road

Wayland, MA 01778

ACKNOWLEDGMENT

County of Manager) ss.

On this day of Jecondon, 1970, before me, a Notary Public within this state, personally appeared the above-named Hermann Statz, personally known by me to be the identified person named in and who executed the foregoing instrument, and subscribed the same in my presence, and acknowledged that he/she executed the same as his/her voluntary and free act and deed.

SEAL

Notary Public J

My Commission Expires Com 122, 1994

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RECORDED: 10/15/2008