07-2	29-2004
Form PTO-1595 (Rev. 10/02) RE	U.S. DEPARTMENT OF COMMERCED U.S. Patent and Trademark Office TSM03-0359
Tab settings ⇔⇔ ↓ ↓ ↓	, The second of
To the honorable Commissioner of Patents and Trademarks:	
1. Name of conveying party(ies): Ping-Wei Wang Chii-Ming Morris Wu 7 - 7 5 - 0 4	Name and address of receiving party(ies) Name: Taiwan Semiconductor Manufacturing Company Ltd. Internal Address:
Additional name(s) of conveying party(ies) attached? Yes X No	
Nature of conveyance: X Assignment	Street Address: No. 6, Li-Hsin Rd. 6 Science-Based Industrial Park
Execution Date: July 14, 2004	City: Hsin-Chu State: Taiwan Zip: 300-77 Additional name(s) & address(es) attached? Yes X No
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: July 14, 2004
A. Patent Application No.(s)	B. Patent No.(s) / 1 / 59 / 955
Additional numbers at	tached? Yes X No
Name and address of party to whom correspondence concerning document should be mailed: Name: Steven H. Slater	Total number of applications and patents involved:
Slater & Matsil, L.L.P.	7. Total fee (37 CFR 3.41) \$40.00
Internal Address:	Enclosed
	X Authorized to be charged to deposit account
Street Address: <u>17950 Preston Rd.</u>	Deposit account number:
Suite 1000	50-1065
City: <u>Dallas</u> State: <u>Texas</u> Zip: <u>75252-5793</u>	(Attach duplicate copy of this page if paying by deposit account)
- Control - Cont	E THIS SPACE
9. Statement and signature. To the best of my knowledge and belief, the foregoing in its a true copy of the original document. Output Description:	formation is true and correct and any attached copy
Kay Houston, Reg. No. 38,495 Name of Person Signing Total number of pages including cover sheet	July 15, 2004 Signature Date
	required cover sheet information to:

07/28/2004 ECDOPER 00000065 10891955 01 FC:8021 40.00 DA

issioner of Patents & Trademarks, Box Assign P.O. Box 1450, Alexandria, VA 22313-1450

PATENT REEL: 015602 FRAME: 0994

ATTORNEY DOCKET NO. TSM03-0353

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 6, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C., is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TSMC, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TSMC, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to TSMC, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TSMC, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful paths, and generally do everything possible to ald said TSMC, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Semiconductor Device with Crack Prevention Ring and Method of Manufacture Thereof		
SIGNATURE OF INVENTOR AND NAME	Plang Wang	Chil-Ming Morris Wu	
DATE	July 14. 10 4		
RESIDENCE (City, County, State)	Hsir-Chu, Taiwan R.O.C.	Hsin-Chu, Talwan R.O.C.	

TSM03-0353

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Assignment

PATENT REEL: 015602 FRAME: 0995

ATTORNEY DOCKET NO. TSM03-0353

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 6, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C., is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TSMC, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TSMC, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to TSMC, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TSMC, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TSMC, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Semiconductor Device with Crack Prevention Ring and Method of Manufacture Thereof		
SIGNATURE OF INVENTOR AND NAME	Ping-Wei Wang	Chil-Ming Morris Wu	
DATE		7/14/2004	
RESIDENCE (City, County, State)	Hsin-Chu, Taiwan R.O.C.	Hsin-Chu, Taiwan R.O.C.	

TSM03-0353

RECORDED: 07/15/2004

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Assignment

PATENT REEL: 015602 FRAME: 0996