FORM PTO-1595 R' 08-24	-1998 ET U.S. DEPT. OF COMMERCE Patent and Trademark Office
81,4198	
1897-426	
To the Honorable Commissioner of Patents a  1 Name of conveying party(ies)	2 Name and address of receiving party(ies):
JIAW-REN SHIH AND JIAN-HSING LEE	Name: Taiwan Semiconductor Manufacturing Company
Additional name(s) or conveying party(ies) attached? Yes X	Internal Address:  Street Address:
3. Nature of conveyance	121 Park Ave. 3
X Assignment Merger	Science-Based Industrial Park
Security Agreement Change of Name	City: Hsin-Chu Zip: Country: Taiwan, R.O.C.
other	
Execution Date: 5/12/98	Additional name(s) & acidress(es) attached? Yes X No
4. Application number(s) or patent number(s):	
A. Patent Application No(s)  Additional numbers attaction in the second	B. Patent No.(s)  thed? Yes X No  6. Total no. of applications and patents involved:: 1
concerning document should be mailed:  Name: GEORGE O. SAILE	
Internal Address:	7 Total fee (37 CFR 3.41): \$ 40.00
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Street Address: 20 MCINTOSH DRIVE	Authorized to be charged to deposit acct.
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Total number of pages comprising cover sheet: 3	

PATENT REEL: 9409 FRAME: 0792

1	For X Application or U.S. Patent	
	By X Inventor(s) or Fresent Owner	
ASSIGNMENT OF INVENTION		
In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,		
ASSIGNOR:		
JIAW-REN SHILL	Topotisma Lee	
Type or print name of ASSIGNOR		
No DS. 67, bection-1. Kung For Rd.	NO. 1 Pro-sarrd,	
Address  He fin- Uhu Tatwan  Republic of China  Nationality	Address Harling Taiwan	
Republic of China	Ropinies of thina	
Nationality (	Nationality	
ASSIGNEE: Taiwan Semiconductor Manufacturing Co. Ltd.		
121 Park Ave. 3 Science-Based Industrial Park Hsin-Chu, Taiwan, R.O.C. Taiwan, R.O.C. Nationality		
and the successors, assigns and logal representatives of the ASSIGNEE		
and the successors, assigns and legal representatives of the ASSIGNEE  (complete one of the following)		
x the entire right, title and interest		
an undivided percent (%) interest for the United States and its territorial possessions  (check the following box/f foreign rights are also to be assigned)  x and in all foreign countries		
in and to any and all improvements which are disclosed in the invention entitled:		
New ESD Device Protection Structure And Process With High Tilt Angle Ge Implant		

PATENT REEL: 9409 FRAME: 0793

U.S. patent application executed on even date herewith (a) U.S. patent application executed on \_\_\_\_\_\_ (b) U.S. application serial no. \_\_\_\_\_\_\_filed on \_\_\_\_\_\_ (c) \_\_\_\_issued \_\_\_ U.S. patent no. (d) (also check (e) if foreign application(s) is also being assigned) and any legal equivalent thereof in a foreign country, including the right to clam priority (e) and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute, thereof, and as to letters patent any re-issue or re-examination thereof. ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. IN WITNESS WHEREOF, I / We have signed this May 12 17 f (Date of signing) WARNING Date of signing must be the same as the date of execution of the application if item (a) was checked above. Signature of ASSIGNOPRIS)

Jan + Ling Ler If ASSIGNOR is a legal entity complete the following information Type or print the name of the above person authorized to sign on behalf of ASSIGNOR Title No witnessing, notarization or legalization is necessary, if the assignment is notarized or legalized then it will only be prima facie evidence (35 USC 261). Use next page if notarization is desired

> PATENT REEL: 9409 FRAME: 0794

\_\_Notarization of Legalization Page Added.

RECORDED: 08/14/1998

and which is found in