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TS02-222 To the Honorable Commissioner or F	102235097	ttached original documents or copy the	oroof
1. Name of conveying party(ies):		2. Name and address of receiving party(ies)	
DENNY DUAN-LEE TANG		Name: Taiwan Semiconductor Manufa	actualna
	5/02	Company	<u>ecturing</u> 2
dditional name(s) or conveying party(ies)	· · · · · · · · · · · · · · · · · · ·	Internal Address:	S. F
		Street Address:	⇒. 2.
3. Nature of conveyance		121 Park Ave. 3	, i e
X Assignment Me	erger	Science-Based Industrial Park	jc
Security Agreement Ch	nange of Name	City: Hsin-Chu Zip: Country: Taiwan, R.O.C.	
other			
Execution Date: 8/30/02		Additional name (n) 9 addison(n) also de ad	V
Execution Date. <u>6/30/02</u>		Additional name(s) & address(es) attached? No	Yes X
5. Name and address of party to wh	Additional numbers attached		
	ioni correspondence i c	Latal na at annications and natanta inco	leader 1
concerning document should be n	nailed:	5. Total no. of applications and patents invo	lved:: <u>1</u>
concerning document should be n Name: GEORGE O. SAILE Internal Address:	nailed:	7. Total fee (37 CFR 3.41): \$ 40.00	olved:: <u>1</u>
Name: GEORGE O. SAILE	nailed:		lved:: <u>1</u>
Name: GEORGE O. SAILE Internal Address:	nailed:	7. Total fee (37 CFR 3.41): \$ 40.00	
Name: GEORGE O. SAILE Internal Address:	# DRIVE :: NY ZIP: 12603	7. Total fee (37 CFR 3.41): \$ 40.00 Enclosed X Authorized to be charged to deposit account number: 19-0033 (Attach duplicate copy of this page if paying by details a second se	it acct.
Name: GEORGE O. SAILE Internal Address: Street Address: 20 MCINTOS City: POUGHKEEPSIE State 9. Statement and signature. To the best of my knowledge and of the original document STEPHEN B. ACKEI Name of Person Signing	DO NOT USE THE belief the foregoing information	7. Total fee (37 CFR 3.41): \$ 40.00 Enclosed X Authorized to be charged to deposit account number: 19-0033 (Attach duplicate copy of this page if paying by details a second se	it acct. eposit account
Name: GEORGE O. SAILE Internal Address: Street Address: 20 MCINTOS City: POUGHKEEPSIE State 9. Statement and signature. To the best of my knowledge and of the original document STEPHEN B. ACKE	DO NOT USE THE belief the foregoing information	7. Total fee (37 CFR 3.41): \$ 40.00 Enclosed X Authorized to be charged to depose 8. Deposit account number: 19-0033 (Attach duplicate copy of this page if paying by decrease on is true and correct and any attached copy 9/20/02	it acct. eposit account

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TS02-222	For x U.S. and/or x Foreign Rights			
	For X Application or U.S. Patent			
	By X Inventor(s) or Present Owner			
ASSIGNMENT OF INVENTION				
	NEE to ASSIGNOR of the sum of One Dollar (\$1.00), the and for other good and valuable consideration,			
ASSIGNOR:				
DENNY DUAN-LEE TANG Type or print name of ASSIGNOR				
Type or print name of ASSIGNOR	Land.			
Address James 12 Jacat	<u>1</u> 034			
20407 Cunningham Pi Sara Address California, USA 95 USA	<u>0</u> 70			
USA				
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 legal rep				
· ·	ete one of the following)			
x the entire right, title and interest				
	_%) interest for the United States and its territorial possessions			
x and in all foreign countries	reign rights are also to be assigned)			
in and to any and all improvements which	are disclosed in the invention entitled:			
Local Thermal Enhancement Of Magne	etic Memory Cell During Programming			

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and which is found in	
(a) x U.S. patent application executed on even	date herewith
(b) U.S. patent application executed on	
[]	filed on
	issued
(also check (e) if fo	oreign application(s) is also being assigned)
(e) x and any legal equivalent thereof in a forei	ign country, including the right to clam priority
	for said invention by the above application or any and as to letters patent any re-issue or re-examination
ASSIGNOR hereby covenants that no assignme be made or entered into which would conflict with this	ent, sale, agreement or encumbrance has been or will is assignment.
pertinent facts and documents relating to said invent may be known and accessible to ASSIGNOR and will a proceeding related thereto and will promptly execute any and all papers, instruments or affidavits required	e will, upon its request, be provided promptly with all tion and said Letters Patent and legal equivalents as testify as to the same in any interference, litigation or and deliver to ASSIGNEE or its legal representatives to apply for, obtain, maintain, issue and enforce said and said equivalents thereof which may be necessary
Aug 30 ,2002 (Date of	
WARNING Date of signing must be the same as the date of exceptions.	Signature of ASSIGNOR(\$)
If ASSIGNOR is a legal entity complete the following information	Type or print the name of the above person authorized to sign on
Note: No witnessing, notarization or legalization is necessary, if the as	behalf of ASSIGNOR Title Ssignment is notarized or legalized then it will only be prima facie evidence (35 USC

261). Use next page if notarization is desired.

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__Notarization of Legalization Page Added.