OMB No. 0651-0027 (exp. 6/30/2005)	-2005 U.S. DEPARTMENT OF COMMERCE Inited States Patent and Trademark Office		
· 4/12/5	TSM04-0501		
To the Director of the U.S. Patent ar 1029	.its or the new address(es) below.		
Name of conveying party(ies)/Execution Date(s):	2. Name and address of receiving party(ies)		
Hung-Wei Chen Yee-Chia Yeo Di-Hong Lee Fu-Liang Yang Chenming Hu	Name: Taiwan Semiconductor Manufacturing Company, Ltd. Internal Address:		
Execution Date(s) HC-12/30/04, YY-02/05/05, DL-12/30/04; FY-12/30/04, CH-02/05/05 Additional name(s) of conveying party(les) attached? Yes X No 3. Nature of conveyance: X Assignment Merger Security Agreement Change of Name Government Interest Assignment Executive Order 9424, Confirmatory License Other	Street Address: No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park City: Hsin-Chu State: Taiwan Country: ROC Zip: 300-77		
A. Patent Application No.(s) Additional numbers a 5. Name and address to whom correspondence	6. Total number of applications and patents		
concerning document should be mailed: Name: Steven H. Slater Slater & Matsil, L.L.P. Internal Address:	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account		
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State: <u>Texas</u> Zip: <u>75252-5793</u> Phone Number: <u>972-732-1001</u>	8. Payment Information		
Fax Number: <u>972-732-9218</u>	a. Credit Card Last 4 Numbers Expiration Date		
Email Address: <u>slater@slater-matsil.com</u> 20 5 DEYRNE 00000307 501065 11104348 40.00 DA	a. Credit Card Last 4 Numbers		
Email Address: slater@slater-matsil.com 2015 DIYRHE 00000307 501065 11104348	b. Deposit Account Number 50-1065		

Documents to be recorded (Including cover sheet) should be faxed to (703) 306-5995, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

REEL: 016471 FRAME: 0359

ATTORNEY DOCKET NO. TSM04-0501

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. 8, 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 Nano-wire Devices and Methods of Fabrication				
SIGNATURE OF INVENTOR	Hung. Wei Chen	Yeshin Yes.	Di-Hong Lee	Futice 3/2	7
AND NAME	Hung-Wei Chen	Yee-Chia Yeo	Di-Hong Lee	Fu-Liang Yang	
DATE	Dec. 30, 2004	Feb. 5, 2005.	Dec. 30, 2004	3º5h Dec 200	4
RESIDENCE	Hsinchu, Taiwan	Singapore,	Austin, Texas	Hsin-Chu, Taiwan	
(City, County, State)	R.O.C.	Republic of Singapore	U.S.	R.O.C.	

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Assignment

PATENT REEL: 016471 FRAME: 0360

ATTORNEY DOCKET NO. TSM04-0501

ASSIGNMENT

TITLE OF INVENTION	Semiconductor Nano-wire Devices and Methods of Fabrication			
SIGNATURE OF INVENTOR AND NAME	Chenming Hu			
DATE	2/5/2005			
RESIDENCE (City, County, State)	Alamo, California U.S.			

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RECORDED: 04/12/2005

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