U.S. Patent and Trademark Office TSM03-0471 To the honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies) Name: Taiwan Semiconductor Manufacturing Compa Street Address: No. 6, Li-Hsin Rd. 6 Science-Based Industrial Park City: Hsin-Chu State: Taiwan Zip: 300-77 Execution Date: CCL & CHW-3/24/2004; SCC & FLY-Additional name(s) & address(es) attached? Yes X No 3/29/2004; WCL & CH-3/31/2004; YCY-4/21/2004 101832020 4. 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: CCL & CHW-3/24/2004; SCC-3/27/2004; FLY-3/29/2004; WCL & CH-3/31/2004; YCY-4/21/2004 Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: 6. Total number of applications and patents 1 involved: Name: Steven H. Slater 7. Total fee (37 CFR 3.41). . . . . . . . . . . \$ \_\_\_\_ 40.00 Slater & Matsil, L.L.P. **Enclosed** Internal Address: \_\_\_ Authorized to be charged to deposit account Street Address:17950 Preston Rd. 8. Deposit account number: 50-1065 City: Dallas \_\_\_\_ State: Texas Zip: 75252-5793 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy Is a true copy of the original document. Barry W. Dove, Reg. No. 45,862 April 26, 2004 Name of Person Signing Date Total number of pages including cover sheet, attachments, and documents: 3

Mail documents to be recorded with required cover sheet information to:

04/30/2004 LHUELLER 00000120 501065

Suite 1000

Commissioner of Patents & Trademarks, Box Assignments 10832020

P.O. Box 1450, Alexandria, VA 22313-1450

40.00 DA 01 FC:8021

P. 04

035785235

ATTORNEY DUCKER .... TSM03-0471

## 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-Rased Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C., is destrous 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 essign 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 High-K Gate Dielectric				
SIGNATURE OF INVENTOR AND NAME	Chun-Chien Lin	Wen-Chin Lea	Yes-Chia Yeo	Cig //	
DATE	3/24/2004		V April 21, 2004.	March 31,2004	
RESIDENCE (City, County, State)	Hsin-Chu, Taiwan R.O.C.	Hsin-Chu, Taiwan R.O.C.	Hsin-Chu, Taiwan R.O.C.	Hsin-Chu, ₹alwan R.O.C.	

TSM03-0471

Page 1 of 2

Assignment

**PATENT** 

REEL: 015270 FRAME: 0120

TO 00219727329218

P.05

038788295

ATTORNEY DOCKET NO. TSM03-0471

## 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 121, Park Avenue 3, Science-Based Industrial Park, Hsin-Chu, Taiwan 300, 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 self 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 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 High-K Gate Dielectric					
SIGNATURE OF INVENTOR AND NAME	Shang-Chin Constant Shang-Chin Chen		E-hardyles Fu-Liang Yang			
DATE	3/29/2004	3/24/2004	3/29/2004	· · · · · · · · · · · · · · · · · · ·		
RESIDENCE (City, County, State)	Hsin-Chu, Talwan R.O.C.	Hsin-Chu, Taiwan R.O.C.	Hsin-Chu, Taiwan R.O.C.	·		

TSM03-0471

Page 2 of 2

Assignment

TOTAL P. 06

**REEL: 015270 FRAME: 0121**