Office	Patent and Trademark
1000-374	02444144
	Please record the attached original documents or copy thereof.
1. Name of conveying party(ies): 5-1-03	2. Name and address of receiving party(ies):
SHAO-YU CHOU	Name: <u>Taiwan Semiconductor Manufacturing</u> <u>Company</u>
Additional name(s) or conveying party(ies) attached?	Internal Address:
3. Nature of conveyance  X Assignment Merger	121 Park Ave. 3 Science-Based Industrial Park City: Hsin-Chu Zip:
Security Agreement Change of Name	Country: Taiwan, R.O.C.
other	
Execution Date: <u>3/14/03</u>	Additional name(s) & address(es) attached? Yes
4. Application number(s) or patent number(s):	¹ No
A. Patent Application No(s)  10,427285	plication, the execution date of the application is: 3/14/03  B. Patent No.(s)
10,427285	B. Patent No.(s)
Additional numbers  5. Name and address of party to whom correspondence concerning document should be mailed:	B. Patent No.(s)  attached? Yes X No
/0,427286  Additional numbers  5. Name and address of party to whom correspondence	B. Patent No.(s)  attached? Yes X No
Additional numbers  5. Name and address of party to whom correspondence concerning document should be mailed:  Name: GEORGE O. SAILE	attached? Yes X No  6. Total no. of applications and patents involved::
Additional numbers  5. Name and address of party to whom correspondence concerning document should be mailed:  Name: GEORGE O. SAILE	B. Patent No.(s)  attached? Yes X No  6. Total no. of applications and patents involved::  7. Total fee (37 CFR 3.41): \$ 40.00
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Additional numbers  5. Name and address of party to whom correspondence concerning document should be mailed:  Name: GEORGE O. SAILE Internal Address:  Street Address: 28 DAVIS AVENUE  City: POUGHKEEPSIE State: NY ZIP: 12603  103 TDIAZI 0000070 190033 10427286  9. Statement and signature.  To the best of my knowledge and belief the foregoing	B. Patent No.(s)  attached? Yes X No  6. Total no. of applications and patents involved::  7. Total fee (37 CFR 3.41): \$ 40.00  Enclosed  X Authorized to be charged to deposit acct.  8 Deposit account number: 19-0033 (Attach duplicate copy of this page if paying by deposit account THIS SPACE

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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
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:
SHAO-YU CHOU Type or print name of ASSIGNOR  No. 3, Allay 218, Lane 90, Yen-Ping Rd  Address  Chang Li, Tao Yuan, Taiwan,  Republic of China Tawan  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 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
is and to any and all improvements which are disclosed in the invention entitled:

A Method To Improve Four-Phase Charge Pump Circuit Reliability Without Degrading Performance

**PATENT REEL: 014035 FRAME: 0967** 

(b) U	S. patent application executed on	*
(c) U.	S. application serial no.	filed on
(d) U	S. patent no.	issued
	(also check (e) if	foreign application(s) is also being assigned)
(e) ar	nd any legal equivalent thereof in a fore	eign 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
	NOR hereby covenants that no assignmentered into which would conflict with t	nent, sale, agreement or encumbrance has been or will his assignment.
pertinent fac may be know	ts and documents relating to said inve n and accessible to ASSIGNOR and wil	EE will, upon its request, be provided promptly with all ntion and said Letters Patent and legal equivalents as II testify as to the same in any interference, litigation or
any and all p application, or desirable	apers, instruments or affidavits require said invention and said Letters Patent to carry out the purposes thereof.  S WHEREOF, I / We have signed this	e and deliver to ASSIGNEE or its legal representatives ed to apply for, obtain, maintain, issue and enforce said and said equivalents thereof which may be necessary
any and all p application, or desirable IN WITNESS	apers, instruments or affidavits require said invention and said Letters Patent to carry out the purposes thereof.  S WHEREOF, I / We have signed this	ed to apply for, obtain, maintain, issue and enforce said to and said equivalents thereof which may be necessary e of signing)
any and all p application, or desirable	apers, instruments or affidavits require said invention and said Letters Patent to carry out the purposes thereof.  S WHEREOF, I / We have signed this	ed to apply for, obtain, maintain, issue and enforce said t and said equivalents thereof which may be necessary
any and all p application, or desirable IN WITNESS	apers, instruments or affidavits require said invention and said Letters Patent to carry out the purposes thereof.  S WHEREOF, I / We have signed this	ed to apply for, obtain, maintain, issue and enforce said that and said equivalents thereof which may be necessary the end of signing)  execution of the application if item (a) was checked above.  Shai-Ju Chou
any and all p application, or desirable IN WITNESS OZ/( WARNING	apers, instruments or affidavits require said invention and said Letters Patent to carry out the purposes thereof.  S WHEREOF, I / We have signed this	ed to apply for, obtain, maintain, issue and enforce said and said equivalents thereof which may be necessary e of signing)  execution of the application if item (a) was checked above.  Share of Assignor(s)  Signature of Assignor(s)
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and which is found in

**RECORDED: 05/01/2003** 

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\_\_Notarization of Legalization Page Added.