

10-27-2003

Office

TS03-120

102584932

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

JUNG-CHIH TSAO, CHI-WEN LI, KEI-WEI CHEN,  
JYE-WEI HSU, HSIEN-PIN FONG, STEVEN LIN,  
RAY CHUANGAdditional name(s) or conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance

☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ other \_\_\_\_\_
Execution Date: **10/2/03**

2. Name and address of receiving party(ies):

Name: **Taiwan Semiconductor Manufacturing Company**

Internal Address:

Street Address:

**121 Park Ave. 3**  
**Science-Based Industrial Park**  
**City: Hsin-Chu Zip:**  
**Country: Taiwan, R.O.C.**

2581 U.S. PTO  
10/687183  
101603
Additional name(s) & address(es) attached? Yes ☒ No

4. Application number(s) or patent number(s):

101687183

If this document is being filed together with a new application, the execution date of the application is: **10/2/03**A. 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:

Name: **GEORGE O. SAILE**

Internal Address: \_\_\_\_\_

Street Address: **28 DAVIS AVENUE**City: **POUGHKEEPSIE** State: **NY** ZIP: **12603**6. Total no. of applications and patents involved: **1**7. Total fee (37 CFR 3.41): **\$ 40.00**☐ Enclosed☒ Authorized to be charged to deposit acct.8. Deposit account number: **19-0033**

(Attach duplicate copy of this page if paying by deposit account)

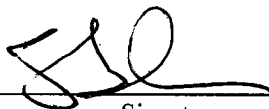
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9. Statement and signature.

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

**STEPHEN B. ACKERMAN**

Name of Person Signing



Signature

**10/16/03**

Date

10/24/2003 ECOOPER 00000064 190033 10687183

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40.00 DA

For ☒ U.S. and/or ☒ Foreign RightsFor ☒ Application or ☐ U.S. PatentBy ☒ 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:****JUNG-CHIH TSAO**

Type or print name of ASSIGNOR

5F, No. 111, Minshiang St.,

Address

Hsin-Chu, Taiwan 300

Taiwan, R.O.C., Republic  
of China

Nationality

**CHI-WEN LIU**

Type or print name of ASSIGNOR

3F, No. 561, Nanda Rd.,

Address

Hsinchu City 300, Taiwan (R.O.C.)

Taiwan, R.O.C., Republic of China

Nationality

**KEI-WEI CHEN**

Type or print name of ASSIGNOR

1F, No. 259, Sec 1, Thongshan Rd.,

Address

Yonghe City, Taipei County 234, Taiwan

Taiwan, R.O.C.

Nationality

Republic of  
China**JYE-WEI HSU**

Type or print name of ASSIGNOR

Jye-Wei Hsu

Address

29, Lane 171, Alley 47, Sec. 1, Chung Hsing

Address

Road, Chung-tung, Hsinchu 310, Taiwan, R.O.C.

Nationality Address

Taiwan, R.O.C., Republic of China

National

**ASSIGNEE:**

Taiwan Semiconductor Manufacturing Co.

No. 6, Li-Hsin Rd. 6

Science Based Industrial Park

Hsin-Chu Taiwan 300-77

R.O.C.

Nationality

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

- ☒ the entire right, title and interest
- ☐ an undivided \_\_\_\_\_ percent (\_\_\_\_%) interest for the United States and its territorial possessions  
(check the following box if foreign rights are also to be assigned)
- ☒ and in all foreign countries

in and to any and all improvements which are disclosed in the invention entitled:

**Novel Method To Reduce Rs Pattern Dependence Effect**

For ☒ U.S. and/or ☒ Foreign RightsFor ☒ Application or ☐ U.S. PatentBy ☒ 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:****HSIEN-PIN FONG**

Type or print name of ASSIGNOR

4F, No. 9, Lane 52, Yusi St.,

Address

Yonghe City, Taipei County 234, Taiwan

Taiwan, R.O.C.

Nationality

Republic of China

**STEVEN LIN**

Type or print name of ASSIGNOR

2F, No. 27, Jingming St., Wunshan District,

Address

Taipei City 116, Taiwan (R.O.C)

Taiwan, R.O.C., Republic

Nationality

of China

**RAY CHAUNG**

Type or print name of ASSIGNOR

2F, No. 35, Chungder St.,

Address

Taipei City, Taiwan (R.O.C.)

Taiwan, R.O.C. Republic of China

Nationality

**ASSIGNEE:**

Taiwan Semiconductor Manufacturing Co.

No. 6, Li-Hsin Rd. 6

Science Based Industrial Park

Hsin-Chu Taiwan 300-77

R.O.C.

Nationality

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

☒ the entire right, title and interest
☐ an undivided \_\_\_\_\_ percent (\_\_\_\_%) interest for the United States and its territorial possessions  
 (check the following box if foreign rights are also to be assigned)
☒ and in all foreign countries

in and to any and all improvements which are disclosed in the invention entitled:

**Novel Method To Reduce Rs Pattern Dependence Effect**

and which is found in

- (a) ☐ U.S. patent application executed on even date herewith  
(b) ☒ U.S. patent application executed on \_\_\_\_\_  
(c) ☐ U.S. application serial no. \_\_\_\_\_ filed on \_\_\_\_\_  
(d) ☐ U.S. patent no. \_\_\_\_\_ issued \_\_\_\_\_  
(e) ☒ and any legal equivalent thereof in a foreign country, including the right to claim priority  
(also check (e) if foreign application(s) is also being assigned)

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  
9/30/2003 (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.

Jung-din H Tsao  
Signature of ASSIGNOR(S)  
Hsien Pin Fang  
S. K. Hsu  
Chi-wen Hsu

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

Note: 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.

\_\_\_\_\_  
Notarization of Legalization Page Added.

and which is found in

- (a) ☐ U.S. patent application executed on even date herewith  
(b) ☒ U.S. patent application executed on 9/30/03 & 10/2/03  
(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) ☒ and any legal equivalent thereof in a foreign country, including the right to claim priority

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.

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IN WITNESS WHEREOF, I / We have signed this

9/30/2003

(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.

Ray Chung  
Signature of ASSIGNOR(S)  
Jingwen Chen  
Kei-wei Chen

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

Note: 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.

\_\_\_\_\_  
Notarization or Legalization Page Added.