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7.20.01

08-03-2001



ID NO. 101703650

FORM PTO-1595  
U.S. Department of Commerce  
(Rev. 6-93)  
OMB No. 0651-0011 (exp. 4/94)

101798005

Patent and Trademark Office

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

1. Name of conveying party(ies): **Jeremy I. Martin, Eric M. Apelgren, Christian Zisl, Paul R. Besser, Srikantewara Dakshina-Murthy, Jonathan B. Smith, Nick Kepler and Fred Cheung**

Additional name(s) of conveying party(ies) attached?  Yes  No

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other

Execution Date: 11/09/00; 11/14/00; 12/20/00; 02/01/01; 02/09/01; 03/02/01, 04/03/01, 04/18/01 respectively

2. Name and address of receiving party(ies):  
Name: **Advanced Micro Devices, Inc.**

Internal Address:  
Street Address: **5204 E. Ben White Blvd.**  
City: **Austin** State: **TX** Zip: **78741**

Additional name(s) & address(es) attached?  Yes  No

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

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s): **09/840,598**  
B. Patent No.(s):

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: **Randall C. Furlong, Ph.D.**  
**Williams, Morgan & Amerson, P.C.**  
**7676 Hillmont, Suite 250**  
City: **Houston** State: **Texas** Zip: **77040**

6. Total number of applications and patents involved: 1

7. Total fee (37 C.F.R. 3.41)----- \$ 40.00  
 Enclosed  
 Authorized to be charged to deposit account

8. Deposit account number: 01-0365/TT3573  
(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

**Randall C. Furlong, Ph.D.**  
Name of Person Signing, Reg. No. 35,144

7/27/2001  
Date

Total number of pages including cover sheet, attachments and documents: 13

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents and Trademarks, Box Assignment  
Washington, D.C. 20231

Certificate of Mailing  
37 C.F.R. 1.8  
I hereby certify that this paper or fee is being deposited with the United States Postal Service "FIRST CLASS MAIL" addressed to: U.S. Patent and Trademark Office, Assignment Division, Box Assignments, CG-4, 1213 Jefferson Davis Hwy., Suite 320, Washington, DC 20231.  
7/27/01 [Signature]  
Date of Deposit Signature

PATENT  
REEL: 012024 FRAME: 0596

05-07-2001



RECORDATION FORM COVER SHEET

U.S. Department of Commerce

101703650

PATENTS ONLY

Patent and Trademark Office

PTO  
1017 U.S.  
09/840598  
04/23/01

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

1. Name of conveying party(ies): Jeremy I. Martin, Eric M. Apelgren, Christian Zisl, Paul R. Besser, Srikantewara Dakshina-Murthy, Jonathan B. Smith and Nick Kepler

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

Name: Advanced Micro Devices, Inc.

Internal Address:

Street Address: 5204 E. Ben White Blvd.

City: Austin State: TX Zip: 78741

Additional name(s) of conveying party(ies) attached?  Yes  No

Additional name(s) & address(es) attached?  Yes  No

3. Nature of conveyance:

- Assignment
- Security Agreement
- Other
- Merger
- Change of Name

Execution Date: 11/09/00; 11/14/00; 12/20/00; 02/01/01; 02/09/01; 03/02/01 and 04/03/01, respectively

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

If this document is being filed together with a new application, the execution date of the application is: 11/09/00; 11/14/00; 12/20/00; 02/01/01; 02/09/01; 03/02/01 and 04/03/01, respectively

A. Patent Application No.(s):

N/A

B. Patent No.(s):

09/840598

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Randall C. Furlong, Ph.D.  
Williams, Morgan & Amerson, P.C.  
7676 Hillmont, Suite 250

City: Houston State: Texas Zip: 77040

6. Total number of applications and patents involved: 1

7. Total fee (37 C.F.R. 3.41)----- \$ 40.00

- Enclosed
- Authorized to be charged to deposit account

8. Deposit account number: 01-0365/TT3573  
(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.

Randall C. Furlong, Ph.D.

4/23/2001

Name of Person Signing, Reg. No. 35,144

Signature

Date

Total number of pages including cover sheet, attachments and documents: 13

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents and Trademarks, Box Assignment  
Washington, D.C. 20231

05/04/2001 6TOM11 00000079 010365 09840598  
01 FC:581 40.00 CH

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NUMBER EL 798 364 749 US

DATE OF DEPOSIT April 23, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service with sufficient postage "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to: Assistant Commissioner for Patents, Washington D.C. 20231.

Signature

PATENT  
REEL: 012024 FRAME: 0597

ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

SELL, ASSIGN AND TRANSFER to ADVANCED MICRO DEVICES, INC. (the "Assignee"), a corporation of Delaware, having a place of business at 5204 East Ben White Boulevard, Austin, Texas 78741, the entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled **SIDEWALL TREATMENT FOR LOW DIELECTRIC CONSTANT (LOW K) MATERIALS BY ION IMPLANTATION**, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States:

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Signature: \_\_\_\_\_  
Jeremy I. Martin

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared JEREMY I. MARTIN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
Eric M. Apelgren

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared ERIC M. APELGREN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
CHRISTIAN ZISTL

Date: \_\_\_\_\_

WITNESSES FOR CHRISTIAN ZISTL:

\_\_\_\_\_  
*Warden Besser*

Date: Nov. 14, 2000

\_\_\_\_\_  
*Paul R. Besser*

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Paul R. Besser

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared PAUL R. BESSER, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
Srikantewara Dakshina-Murthy

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared SRIKANTEWARA DAKSHINA-MURTHY, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas

Signature: Jonathan B. Smith  
Jonathan B. Smith

Date: Nov 9, 2000

WITNESSES FOR JONATHAN B. SMITH:

[Signature]

Date: 11/09/2000

[Signature]

Date: 11/09/2000

Signature: \_\_\_\_\_  
Nick Kepler

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared NICK KEPLER, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas

STATE OF TEXAS        )  
                              ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared FRED CHEUNG, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas

**ASSIGNMENT**

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

SELL, ASSIGN AND TRANSFER to ADVANCED MICRO DEVICES, INC. (the "Assignee"), a corporation of Delaware, having a place of business at 5204 East Ben White Boulevard, Austin, Texas 78741, the entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled **SIDEWALL TREATMENT FOR LOW DIELECTRIC CONSTANT (LOW K) MATERIALS BY ION IMPLANTATION**, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements:

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Signature: \_\_\_\_\_  
Jeremy I. Martin

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared JEREMY I. MARTIN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
Eric M. Apelgren

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared ERIC M. APELGREN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL] \_\_\_\_\_  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
CHRISTIAN ZISTL

Date: \_\_\_\_\_

WITNESSES FOR CHRISTIAN ZISTL:

\_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Paul R. Besser

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared PAUL R. BESSER, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL] \_\_\_\_\_  
Notary Public in and for the State of Texas



Signature: \_\_\_\_\_  
Srikantewara Dakshina-Murthy

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared SRIKANTEWARA DAKSHINA-MURTHY, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL] \_\_\_\_\_  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
Jonathan B. Smith

Date: \_\_\_\_\_

WITNESSES FOR JONATHAN B. SMITH:

\_\_\_\_\_  
Date: \_\_\_\_\_

\_\_\_\_\_  
Date: \_\_\_\_\_

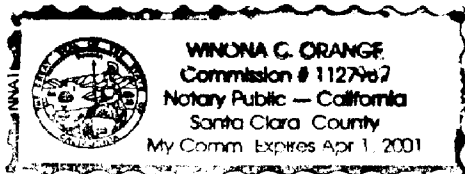
Signature: Nick Kepler  
Nick Kepler

Date: 2/1/01

STATE OF CALIFORNIA )  
                          ) ss.  
COUNTY OF Chico )

BEFORE ME, the undersigned authority, on this 1<sup>st</sup> day of FEBRUARY, 2001, personally appeared NICK KEPLER, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL] \_\_\_\_\_  
Notary Public in and for the State of California



Winona G. Orange  
Notary Public in and for the State of California

Signature: \_\_\_\_\_  
Fred Cheung

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Fred Cheung

*Fred Cheung*

Date: \_\_\_\_\_

4/18/61

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared FRED CHEUNG, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas

ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

SELL, ASSIGN AND TRANSFER to ADVANCED MICRO DEVICES, INC. (the "Assignee"), a corporation of Delaware, having a place of business at 5204 East Ben White Boulevard, Austin, Texas 78741, the entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled **SIDEWALL TREATMENT FOR LOW DIELECTRIC CONSTANT (LOW K) MATERIALS BY ION IMPLANTATION**, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

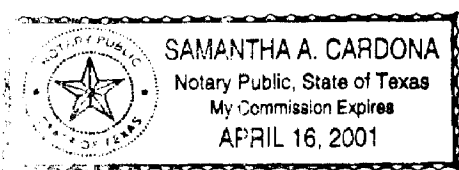
Signature: *Jeremy I. Martin*  
Jeremy I. Martin

Date: 4/13/01

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this 13 day of April, 2001, personally appeared JEREMY I. MARTIN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]



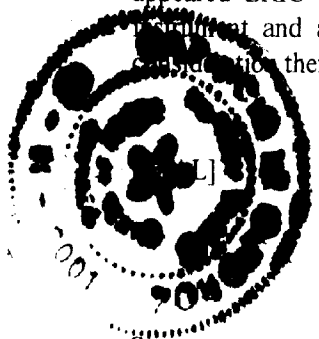
*Samantha A. Cardona*  
Notary Public in and for the State of Texas

Signature: Eric M. Apelgren  
Eric M. Apelgren

Date: 3/2/01

STATE OF TEXAS       )  
  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this 2nd day of March, 2001, personally appeared ERIC M. APELGREN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.



Patricia G. Gundersen  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
CHRISTIAN ZISTL

Date: \_\_\_\_\_

WITNESSES FOR CHRISTIAN ZISTL:

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

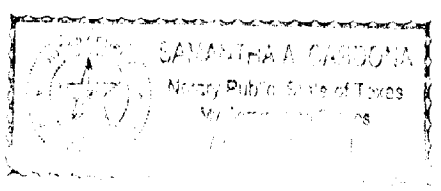
Signature: Paul R. Besser  
Paul R. Besser

Date: 12/20/00

STATE OF TEXAS       )  
  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this 21 day of December, 2000, personally appeared PAUL R. BESSER, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]



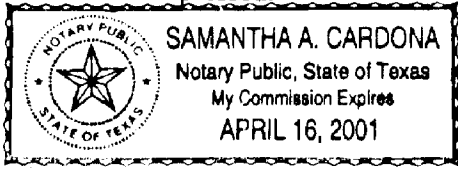
Samantha A. Cardona  
Notary Public in and for the State of Texas

Signature: S. Dakshina-Murthy  
Srikantewara Dakshina-Murthy

Date: 2/7/01

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this 7 day of February, 2001, personally appeared SRIKANTEWARA DAKSHINA-MURTHY, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL] 

Samantha A. Cardona  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
Jonathan B. Smith

Date: \_\_\_\_\_

WITNESSES FOR JONATHAN B. SMITH:

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Nick Kepler

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared NICK KEPLER, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL] \_\_\_\_\_  
Notary Public in and for the State of Texas

Signature: \_\_\_\_\_  
Fred Cheung

Date: \_\_\_\_\_

STATE OF TEXAS        )  
                                  ) ss.  
COUNTY OF TRAVIS    )

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, personally appeared FRED CHEUNG, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

\_\_\_\_\_  
Notary Public in and for the State of Texas