To the Director of the U.S. Patent

1. Name of conveying party(ies):
   Tzu-Hsuan Hsu (01/25/2007), and Hang-Ting Lue (01/30/2007)

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

2. Name and address of receiving party(ies)
   MACRONIX INTERNATIONAL CO., LTD.
   No. 16, Li-Hsin Rd., Science-Based Industrial Park
   City: Hsinchu
   State: Taiwan ROC
   Country: Zip: 60000

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

3. Nature of conveyance/Execution Date(s):
   Execution Date(s): In parentheses after inventor name
   X Assignment  Marger  Change of Name
   Security Agreement  Joint Research Agreement
   Government Interest Assignment
   Executive Order 9424, Confirmatory License
   Other

4. Application or patent number(s):
   X This document is being filed together with a new application.
   A. Patent Application No(s)
   B. Patent No(s)

   Additional numbers attached? Yes X No

5. Name and address to whom correspondence concerning document should be mailed:
   Name: Robert H. Berdo, Jr.
   RABIN & BERDO, PC
   Internal Address: Atty. Dkt.: SUND-832CIP
   Street Address: 1101 14th St., NW
   Suite 500
   City: Washington
   State: DC
   Zip: 20005

   Phone Number: (202) 371-8976
   Fax Number: (202) 408-0924
   Email Address: firm@rabinberdo.com

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41)
   $ 40.00
   X Authorized to be charged by credit card
   Authorized to be charged to deposit account
   Enclosed
   None required (government interest not affecting title)

8. Payment Information
   a. Credit Card Last 4 Numbers 4591
      Expiration Date 08/31/07
   b. Deposit Account Number
      Authorized User Name

9. Signature:
   Signature
   Robert H. Berdo, Jr. - 38,075
   Name of Person Signing

   April 17, 2007
   Date

   Total number of pages including cover sheet, attachments, and documents: 3

   94/18/2007 JADD01 00000659 11765322
   85 FC:8821 40.00 0P

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PATENT
REEL: 019273 FRAME: 0346
ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS Tzu-Hsuan Hsu and Hang-Ting Lue
hereinafter referred to collectively as the assignor, has invented a certain improvement relating to
VERTICAL CHANNEL MEMORY AND MANUFACTURING METHOD THEREOF AND OPERATING METHOD USING THE
SAME

[ X ] the inventor's declaration for said application being executed concurrently with the execution of this instrument; said
application to be filed in the United States Patent and Trademark Office;
[ ] said application having been filed in the United States Patent and Trademark Office on ______
authorization being hereby given to my attorneys, Steven M. Rabin and Robert H. Berdo, Jr. of RABIN & BERDO, P.C., 1101
14th Street, N.W., Suite 500, Washington, D.C. 20005., to insert here in parentheses (Application Serial No. ______) the
application serial number of said application when known;
[ ] said application having been filed under the Patent Cooperation Treaty on ______
Serial No. ____________., the United States of America being designated.

AND WHEREAS Macronix International Co., Ltd. of No.16, Li-Hsin Rd., Science-Based Industrial Park, Hsinchu,
Taiwan, R.O.C., hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said
application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which
may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar ($1.00), and other good and valuable consideration
paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and
transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to
said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents
which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said
assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and
continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all
renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or
appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals,
reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as
ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not
been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns,
any and all acts relating to the obtaining or to the asserting of said
patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to Issue Letters Patent on said
application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and
assigns, in accordance herewith.

RABIN & BERDO, P.C., Washington, D.C.

PATENT
REEL: 019273 FRAME: 0347
ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT
Page 2 of 2

ASSIGNOR: Tzu-Hsuan Hsu
Signature: ____________________________
Printed Name: Tzu-Hsuan Hsu
Date: 2007.1.25

WITNESS:
Signature: ____________________________
Printed Name: _________________________
Date: ____________________________

ASSIGNOR: Hang-Ting Lue
Signature: ____________________________
Printed Name: Hang-Ting Lue
Date: 2007.1.30