FORM PTO-1596

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereto: 1. Name of conveying party(ies): 1) Chun-Lien SU 2) Chun-Chi WANG 3) Ming-Shang CHEN 1 - 1 - 0 - 2 Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance: Assignment	To the Honorable Commissioner of Patents and Trademarks:	
Name: Macronix International Co., Ltd. Little Name Name: Macronix International Co., Ltd. Name: Name: Macronix International Co., Ltd. Name: Name:		
3. Nature of conveyance: Assignment	1) Chun-Lien SU 2) Chun-Chi WANG	Name: Macronix International Co., Ltd.
Assignment		1017
City: Hsinchu Zip/Postal Code: State or Area: Taiwan Zip/Postal Code: Country: R.O.C. Additional name(s) & address(es) attached? Yes ★ No 4. Application number(s) or patent number(s): 101 0 43 1 4 5 If the document is being filed together with a new application, the execution date of the application is: July 21, 2001, December 27, 2001 December 28, 2001 A. Patent Application No(s). 1002 RHARIS1 00000032 10043145 101	•	•
Additional name(s) & address(es) attached? Yes X No 4. Application number(s) or patent number(s): 10, 0 43 1 45 If the document is being filed together with a new application, the execution date of the application is: July 21, 2001, December 27, 2001 December 28, 2001 A. Patent Application No(s). 1002 RHARI31 00000032 10043145 101	□ Other	
4. Application number(s) or patent number(s): 101 0 43 1 45 If the document is being filed together with a new application, the execution date of the application is: July 21, 2001, December 27, 2001 A. Patent Application No(s). 8. Patent No(s). B. Patent No(s). 40.00 0 Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: LOWE HAUPTMAN GILMAN & BERNER (22429) Internal Address: Street Address: 1700 Diagonal Road, Suite 310		
If the document is being filed together with a new application, the execution date of the application is: July 21, 2001, December 27, 2001 December 28, 2001 A. Patent Application No(s). OO2 RHARIS1 00000032 10043145 81 40.00 0 Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: LOWE HAUPTMAN GILMAN & BERNER (22429) Internal Address: Street Address: 1700 Diagonal Road, Suite 310		Additional name(s) & address(es) attached? Yes X No
Street Address: 1700 Diagonal Road, Suite 310 Name and address of party to whom correspondent concerning document should be mailed: 7. Total fee (37 CFR 3.41)	a1 40.00 0P	
Internal Address: Street Address: 1700 Diagonal Road, Suite 310	a1 40.00 0P	ttached? □ Yes ⊠ No
Street Address: 1700 Diagonal Road, Suite 310	Additional numbers at 5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41)
	Additional numbers at Additional numbers at S. Name and address of party to whom correspondence concerning document should be mailed: Name: LOWE HAUPTMAN GILMAN & BERNER (22429)	 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41)
	Additional numbers at Additional numbers at Additional numbers at S. Name and address of party to whom correspondence concerning document should be mailed: Name: LOWE HAUPTMAN GILMAN & BERNER (22429) Internal Address: Street Address: 1700 Diagonal Road, Suite 310 City: Alexandria, Virginia 22314	 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41)
DO NOT USE THIS SPACE	Additional numbers at Additional numbers at Additional numbers at S. Name and address of party to whom correspondence concerning document should be mailed: Name: LOWE HAUPTMAN GILMAN & BERNER (22429) Internal Address: Street Address: 1700 Diagonal Road, Suite 310 City: Alexandria, Virginia 22314	 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41)

PATENT REEL: 012473 FRAME: 0680

ASSIGNMENT

This assignment agreement is applicable to an invention entitled (Invention Title)
METHOD FOR ELIMINATING POLYSILICON RESIDUE
The PATENT RIGHTS referred to in this agreement are:
(check one) a patent application for this invention, executed by the ASSIGNOR(S)
concurrently with this assignment.
U.S. patent application Serial No,filed
a U.S. patent application based on PCT International Application
Nofiled on (date)(U.S. patent application
Serial No, if known).
U.S. patent No, issued
The PATENT RIGHTS also include all divisions reissues, continuations and extensions of
the patents and patent applications identified above.
The PATENT RIGHTS assigned under this agreement are:
(check one) U.S. patent rights only.
Worldwide patent rights. In this case, the assignee shall have the right to
claim the benefit of the filing date of any U.S. or foreign patent application
for this invention.
The ASSIGNOR(S) referred to in this agreement is (or are) the inventor(s) whose signatures
appear on page 2 of this Assignment and any Supplemental Sheet(s).
The ASSIGNEE referred to in this agreement is:
(Name of Assignee) MACRONIX INTERNATIONAL CO., LTD.
(Address) No.16, LI HSIN ROAD, SCIENCE-BASED INDUSTRIAL PARK, HSINCHU,
TAIWAN, R.O.C.
The ASSIGNEE is:
(check one) An individual.
A Partnership.
A Corporation of
(other)
A GEICNEE and other good and
The ASSIGNOR(S), in consideration of \$10.00 paid by the ASSIGNEE, and other good and
valuable consideration, receipt of which is acknowledged, hereby assign(s) the following
rights to the ASSIGNEE, its successors and assigns:
the full and exclusive right to the invention;
the entire right, title and interest in and to the PATENT RIGHTS;
the right to sue and recover for any past infringement; and
the right to sae and received the right to claim priority under 35 USC 119, 35 USC 120, or any other applicable
provisions, based on any earlier patent applications for this invention.

PATENT REEL: 012473 FRAME: 0681

THIS IS PAGE 2 OF AN ASSIGNMENT FROM THE INVENTOR(S) TO ASSIGNEE: MACRONIX INTERNATIONAL CO., LTD.

INENTION TITLE: METHOD FOR ELIMINATING POLYSILICON RESIDUE

As to all U.S. patent applications assigned under this agreement, the ASSIGNOR(S) hereby authorize(s) and request(s) the Commissioner of Patents and Trademark to issue all Letters Patent to the ASSIGNEE as the assignee of the entire right, title and interest, for the sole use and enjoyment of said ASSIGNEE, its successors and assigns.

Further, the ASSIGNOR(S) agree(s) to communicate to said ASSIGNEE, or its representatives, any fact known to the ASSIGNOR(S) with respect to said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause and all Letter Patent to be issued to said ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention.

The ASSIGNOR(S) authorize(s) the attorneys and agents who have the power of attorney in this application to check any appropriate boxes and to insert the Serial Number and filing date in this document after it has been executed.

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Chun-Lien SU Name of sole or first inventor	Chan-Lien Su Signature	7/21 20/ July 21, 200,
Chun-Chi WANG Name of second inventor, if any	Chun- Chi Wan 9 - Signature	Date
Ming-Shang CHEN Name of third inventor, if any	Chun-ch Wang - Signature Ming Chang Chen Signature	Date
Name of fourth inventor, if any	Signature	Date
Name of fifth inventor, if any	Signature	Date
Name of sixth inventor, if any	Signature	Date
Name of seventh inventor, if any	Signature	Date
Name of eighth inventor, if any	Signature	Date

PATENT
RECORDED: 01/14/2002 REEL: 012473 FRAME: 0682