05-27-2003 ATTORNEY DOCKET NO.: 023-0019 U.S. DEPARTMENT OF COMMERCE SHEET Patent and Trademark Office 102456508 To the Honorable Commissioner of Pa ached original documents or copy thereof. 1. Name of conveying party(ies): 5-22-03 2. Name and address of receiving party(ies): (a) Roy E. Scheuerlein (e) Sucheta Nallamothu MATRIX SEMICONDUCTOR, INC. (f) Alper Ilkbahar (b) Christopher Petti Internal Address: (c) Andrew J. Walker (g) Luca Fasoli (d) En-Hsing Chen (h) Igor Kouznetsov Street Address: 3230 Scott Boulevard Additional name(s) of conveying party(ies) attached? City: Santa Clara State: CA ZIP: 95054 No. Yes 3. Nature of Conveyance: Merger Security Agreement Change of Name Other _____ Execution Date: (a, c, e, f, g) - 04-18-2003; (b, d) - 04-22-2003; (h) - 04-30-20034. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.: 10/335,078 B. Patent No .: Additional numbers attached? Yes No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: Andrew C. Graham Internal Address: Zagorin, O'Brien & Graham, L.L.P. Street Address: 401 West 15th Street, Suite 870 City AUSTIN State TX ZIP 78701 7. Total Fee (37 CFR 3.41): \$ 40.00 A check is enclosed for the Total Fee shown above Please charge the Total Fee shown above to Deposit Account 50-0631 Authorized to charge additional fees to Deposit Account 50-0631 DO NOT USE THIS SPACE 8. 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. 5/19/03 Andrew C. Graham, Reg. No. 36,531 Name of Person Signing Signature 5/23/2003 LMUELLER 00000088 10335078 Total number of pages including cover sheet: __7 FC:8021 40.00 OP Express Mail No. N/A

ASSIGNMENT OF INVENTION

For good and valuable consideration, the receipt of which is hereby acknowledged, I, an ASSIGNOR named below,

Roy E. Scheuerlein of Cupertino, CA Christopher Petti Mountain View, CA of Andrew J. Walker Mountain View, CA of En-Hsing Chen of Sunnyvale, CA Sucheta Nallamothu San Jose, CA of Alper Ilkbahar of San Jose, CA Luca Fasoli of San Jose, CA Igor Koutnetsov of Santa Clara, CA KOUZNETSOV SUNNYVALE hereby sell, assign and transfer to ASSIGNEE: Matrix Semiconductor, Inc., a Delaware corporation, having a place of business at 3230 Scott Boulevard, Santa Clara, CA 95054 its successors, assigns and legal representatives, my entire right, title and interest throughout the world, including all rights to claim priority, in and to the invention(s) disclosed in: U.S. Patent Application executed on or about the date of this Assignment, U.S. Patent Application executed on ______, or U.S. Provisional Application U.S. Application No.: 10/335,078 , filed on December 31, 2002 International Application No.: PCT/, filed on______ ENTITLED: PROGRAMMABLE MEMORY ARRAY STRUCTURE INCORPORATING SERIES-CONNECTED TRANSISTOR STRINGS AND METHODS FOR FABRICATION AND **OPERATION OF SAME**, and naming as INVENTOR(S): Roy E. Scheuerlein, Christopher Petti, Andrew J. Walker, En-Hsing Chen, Sucheta Nallamothu, Alper Ilkbahar, Luca Fasoli, Igor Koutnetsov including without limitation, my entire right, title and interest in and to any and all United States and foreign applications (including international, regional and foreign national applications) for said invention(s), including divisions, continuations, continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all patents of every country or region that may be granted or have been granted for said invention(s), including any reissues and reexaminations thereof. To comply with 37 C.F.R. § 3.21 for recording this Assignment, I authorize and request that the application number and filing date be inserted here, if not already shown above, (___/_____, filed _______) when they become known. I authorize ASSIGNEE to apply for patents of foreign countries for said invention(s), and to claim all rights of priority without further authorization from me.

I agree to execute any and all papers useful in connection with any and all United States and foreign applications (including international, regional, and foreign national applications), and

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Attorney Docket No.: 023-0019

PATENT

generally to do everything possible to aid ASSIGNEE, its successors, assigns and nominees, at their request and reasonable expense, in obtaining and enforcing patents for said invention(s) in all countries.

I hereby covenant that no assignment, sale, license, agreement, or encumbrance has been or will be made or entered into that would conflict with this Assignment.

I authorize and request the Commissioner of Patents and Trademarks to issue any U.S. Letters Patent that may be granted for said invention(s) to ASSIGNEE, its successors or assigns.

Executed on April	18,2003	by Roy & Scheuerlein
		Roy E. Scheuerlein

----- Notary Use Below -----

State of CALIF
County of SANTA CHARA

On 4/3/03, Roy E. Scheuerlein, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to within this instrument, personally appeared before me and acknowledged to me that he/she executed this instrument in his/her authorized capacity, and that by his/her signature, he/she or the entity upon behalf of which he/she acted, executed the instrument.

LORIE ARKLEY
Commission # 1324963
Notary Public - California
Santa Clara County
My Comm. Expires Oct 13, 2005

WITNESS my hand and official seal.

Signature of Notary

Executed on April 22, 2003 by Christopher Petti			
Notary Use Below			
State of <u>CALIF</u> County of <u>SANTA</u> CIARA			
On, Christopher Petti, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to within this instrument, personally appeared before me and acknowledged to me that he/she executed this instrument in his/her authorized capacity, and that by his/her signature, he/she or the entity upon behalf of which he/she acted, executed the instrument.			
WITNESS my hand and official seal. LORIE ARKLEY Commission # 1324963 Nothin, Public - California & Ganta Clara County			
My Comm. Expires Oct 13, 2005 Signature of Notary			
A			
Executed on 18th April , 200 3 by Andrew J. Walker			
Notary Use Below			
State of CHLIF County of SANTA CHRA			
On 4-13-23, Andrew J. Walker, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to within this instrument, personally appeared before me and acknowledged to me that he/she executed this instrument in his/her authorized capacity, and that by his/her signature, he/she or the entity upon behalf of which he/she acted, executed the instrument.			
LORIE ARKLEY Commission # 1324963 Notary Public - California \$ Santa Clara County My Comm. Expires Oct 13, 2005			

Executed on 04-11-03, 200 by En-Hsing then			
Notary Use Below			
State of <u>CALIF</u> County of <u>SANTA</u> <u>C/ARA</u>			
On <u>4-23-03</u> , En-Hsing Chen, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to within this instrument, personally appeared before me and acknowledged to me that he/she executed this instrument in his/her authorized capacity, and that by his/her signature, he/she or the entity upon behalf of which he/she acted, executed the instrument.			
LORIE ARKLEY Commission # 1324963 Notary Public - California			
Santa Clara County My Comm. Expires Oct 13, 2005 Signature of Notary			
Executed on 4/13/, 2003 by scelet a Mallomolter Sucheta Nallamothu			
Notary Use Below			
State of <u>CALIF</u> County of <u>JANIA</u> <u>CIARA</u>			
On <u>4-18-63</u> , Sucheta Nallamothu, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to within this instrument, personally appeared before me and acknowledged to me that he/she executed this instrument in his/her authorized capacity, and that by his/her signature, he/she or the entity upon behalf of which he/she acted, executed the instrument.			
LORIE ARKLEY WITNESS my hand and official seal. Commission # 1324963			
Notary Public - California & Santa Clara County My Comm. Expires Oct 13, 2005 Signature of Notary			

Executed on April 17th, 2003 by Alper Illeburher			
Notary Use Below			
State of CALIF County of SANTA CIAGO			
On, Alper Ilkbahar, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to within this instrument, personally appeared before me and acknowledged to me that he/she executed this instrument in his/her authorized capacity, and that by his/her signature, he/she or the entity upon behalf of which he/she acted, executed the instrument.			
LORIE ARKLEY Commission # 1324963 Notary Public - California Santa Clara County WITNESS my hand and official seal.			
My Comm. Expires Oct 13, 2005 Signature of Notary			
Δ.			
// 1 /			
Executed on Airric 18th, 200 3 by Luca Fasoli			
Executed on Air RIL 18th, 200 3 by Luca Fasoli			
\			
Notary Use Below			

Executed on $April 30$, 2003 by	Igor Kouzutset Igor Koutnetsov Kouznetsov			
Notary Use Below				
State of <u>CALIF</u> County of <u>SANTA</u> CIARA				
On <u>4-30-03</u> , Igor Koutnetsov, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to within this instrument, personally appeared before me and acknowledged to me that he/she executed this instrument in his/her authorized capacity, and that by his/her signature, he/she or the entity upon behalf of which he/she acted, executed the instrument.				
LORIE ARKLEY Commission # 1324963 Notary Public - California Santa Ctara County My Comm. Expires Oct 13, 2005	WITNESS my hand and official seal. Signature of Notary			