Docket No.: SLA0806 12-04-2003 FORM PTO-1595 (Modified) U.S. DEPARTMENT OF COMMERCE (Rev. 6-93) OMB No. 0651-0011 (exp.4/94) Patent and Trademark Office Copyright 1994-97 LegalStar P08/REV02 Tab settings -To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. Name of conveying party(ies): Name and address of receiving party(ies): Sheng Teng Hsu Name: Sharp Laboratories of America, Inc. Internal Address: ☐ Yes 🛛 No Additional names(s) of conveying party(ies) Nature of conveyance: ☒ Assignment Street Address: 5750 NW Pacific Rim Boulevard ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other City: Camas State: WA ZIP: 98607 Execution Date: November 24, 2003 4. Application number(s) or registration numbers(s): If this document is being filed together with a new application, the ex ecution date of the application is: November 24, 2003 A. Patent Application No.(s) B. Patent No.(s) 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: Name: David C. Ripma, Patent Counsel 7. Total fee (37 CFR 3.41):....\$ 40.00 Internal Address: Registration No. 27,672 ☐ Enclosed - Any excess or insufficiency should be credited or debited to deposit account Sharp Laboratories of America, Inc. Authorized to be charged to deposit account Street Address: 5750 NW Pacific Rim Boulevard 8. Deposit account number: 191-457 City: Camas WA State: 1003 100048 0000017 191457 DO NOT USE THIS SPACE 40.00 DA 9. Statement and signature. To the best of my knowledge and belief, the foregoing limformation is the and concert and any attached copy is a true copy of the original document. David C. Ripma, Reg. #27,672 November 24, 2003 Name of Person Signing Signature Date Total number of pages including cover sheet, attachments, and document: PATENT

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ASSIGNMENT

WHEREAS, the undersigned Sheng Teng Hsu, a resident of Camas, WA, (hereinafter termed "inventor") have invented certain new and useful improvements in:

3D RRAM

and	have	executed	l a dec	laration	or o	oath [·]	for a	an a	applica	tion f	or a	United	States
pate	ent dis	sclosing a	nd ide	ntifying	the	inver	ntior	n:					

X	On the <u>24th</u> day of November, 2003;
	Or
	Said application having been previously filed and assigned Serial Number / and filing date

WHEREAS Sharp Laboratories of America, Inc., a corporation of the State of Washington, (hereinafter termed "Assignee"), having a place of business at 5750 NW Pacific Rim Boulevard, Camas, State of Washington, wishes to acquire the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventor (all collectively hereinafter termed "said invention"), and in and to any and all patents, certificates of invention and other forms of protection thereon (hereinafter termed "patents") applied for or granted in the United States and/or other countries.

NOW THEREFORE, for good and valuable consideration acknowledged by said Inventor to have been received in full from said Assignee:

1. Said Inventor does hereby sell, assign, transfer and convey unto said Assignee, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply in any and all countries of the world for patents, certificates of inventions or other government grants on said invention, including the right to apply for patents pursuant to the International Convention for the Protection of Industrial property or pursuant to any other convention, treaty, agreement or understanding; (c) in and to any and all applications filed and any and all patents, certificates of inventions or other governmental grants granted on

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PATENT REEL: 014744 FRAME: 0075 said invention in the United States or any other country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; (d) in and to each and every reissue or extension of any of said patents; and (e) in and to each and every patent claim resulting from a reexamination certificate for any and all of said patents.

- 2. Said Inventor hereby covenants and agrees to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and other countries. Such cooperation by said inventor shall include prompt production of pertinent facts and documents, giving of testimony, executing of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed: (b) for complying with any duty of disclosure; (c) for prosecuting any of said applications; (d) for filing and prosecuting substitute. divisional, continuing or additional applications covering said invention; (e) for filing and prosecuting application for reissue of any of said patents; (f) for interference or other priority proceedings involving said invention; and (a) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, reexamination proceedings, compulsory licensing proceedings, infringement actions and court actions: provided. however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.
- 3. The terms and covenants of this Assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor, said Inventor's heirs, legal representatives and assigns.
- 4. Said Inventor hereby warrants and represents that said Inventor has not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

(1) A leng Lug I den Sheng Teng Hsu, Signature	11/24/03	
Sheng Teng Hsu, Signature	(Date)	_

IN WITNESS WHEREOF, the said Inventor has executed said

Assignment on the date given below.

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RECORDED: 11/24/2003

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