Docket No.: SLA0825 U.S. DEPARTMENT OF COMMERCE 03-16-2004 IEET FORM PTO-1595 (Modified) (Rev. 6-93) Patent and Trademark Office OMB No. 0651-0011 (exp.4/94) Copyright 1994-97 LegalStar P08/REV02 Tab settings ◆ ◆ To the Honorable Commissioner of Patents and Placetta and Placetta Reservoirs the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Jer-Shen Maa, Jong-Jan Lee, Douglas J. Tweet and Sheng Teng Hsu Name: Sharp Laboratories of America, Inc. 3/3/04 Internal Address: ☐ Yes 🛛 No Additional names(s) of conveying party(ies) 3. Nature of conveyance: Street Address: 5750 NW Pacific Rim Boulevard ■ Assignment ☐ Merger ☐ Security Agreement Change of Name State: WA ZIP: 98607 City: Camas ☐ Other Execution Date: March 2, 2004 Application number(s) or registration numbers(s): If this document is being filed together with a new application, the execution date of the application is: March 3, 2004 B. Patent No.(s) A. Patent Application No.(s) 10794158 **⊠** No Additional numbers attached? ☐ Yes 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 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: 19-1457 _ ZIP: 98607 City: Camas State: 10794158 **DO NOT USE THIS SPACE** 03/15/2004 ECDOPER 00000100 191457 40.00 DA 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. March 3, 2004 David C. Ripma, Reg. No. 27,672 Signature Date Name of Person Signing Total number of pages including cover sheet, attachments, and document: PATENT

REEL: 015064 FRAME: 0501

ASSIGNMENT

WHEREAS, the undersigned Jer-Shen Maa, a resident of Vancouver, WA, Jong-Jan Lee, a resident of Camas, WA, Douglas J. Tweet, a resident of Camas, WA and Sheng Teng Hsu, a resident of Camas, WA, (hereinafter termed "inventors") have invented certain new and useful improvements in:

THREE-DIMENSIONAL QUANTUM DOT STRUCTURE FOR INFRARED PHOTODETECTION

and have executed a declaration or oath for an application for a United States patent disclosing and identifying the invention:

X	On the 2 nd day of March, 2004;
	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 Inventors (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 Inventors to have been received in full from said Assignee:

1. Said Inventors do 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

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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 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 Inventors hereby covenant and agree 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 inventors 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 (g) 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 Inventors, said Inventor's heirs, legal representatives and assigns.
- 4. Said Inventors hereby warrant and represent that said Inventors have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

Patent Assignment P0825

Ju-sher man Jer-Shen Maa (Signature)	3-2-04
Jer-Shen Maa (Signature)	(Date)
IN MITNIESS MUEDEOE the exid by	venter has executed said
IN WITNESS WHEREOF, the said Inv gnment on the date given below.	rentor has executed said
Jong-Jan Lee (Signature)	3/2/04
Jong-Jan Lee (Signature)	(Date)
IN WITNESS WHEREOF, the said Inv	entor has executed said Assignm
he date given below.	
he date given below.	
he date given below.	Моськ 2, 2004 (Date)
Douglas J. Tweet (Signature) IN WITNESS WHEREOF, the said In	الم ديار كى كون (Date) ventor has executed said Assignr

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RECORDED: 03/03/2004

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