PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Hao PAN	03/09/2011

RECEIVING PARTY DATA

Name:	Sharp Laboratories of America, Inc.	
Street Address:	5750 NW Pacific Rim Blvd.	
City:	Camas	
State/Country:	WASHINGTON	
Postal Code:	98607	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13045338

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: SLA2898 (7146.0486)

NAME OF SUBMITTER: Kevin L. Russell

Total Attachments: 2

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OP \$40.00 13045

PATENT REEL: 025936 FRAME: 0250

ASSIGNMENT

WHEREAS, the undersigned Hao PAN, a resident of Camas, Washington, (hereinafter termed "Inventor") has invented certain new and useful improvements in:

"Image Upscaling Based Upon Directional Interpolation"

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

Declaration executed on 3/4/11		
or	ė.	
Having been previously filed and filing date : and	assigned Serial Number and	

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, Washington 98607, 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 hereby sells, assigns, transfers and conveys 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 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.
- Said Inventor hereby covenants and agrees to cooperate with said 2. Assignee to enable said Assignee to enjoy to the fullest extent the

PATENT REEL: 025936 FRAME: 0251 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 therefore 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 Inventor 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 Inventor hereby warrants and represents that said Inventor has not entered and will not enter into any assignment, contract, or understanding in conflict with this Assignment.

IN WITNESS WHEREOF, the said Inventor has executed this Assignment on the date given below:

Hao PAN

(Signature)

(Date)