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To the Honorable Commissioner of Patents and Trademarks: Please record the				
1. Name of conveying party(ies):	2. Name and address of receiving party(ies);			
KLATCHKO, ASHER O6 350/ HOWELLS, SAMUEL C. WARD MICHAEL A O6 250/	Name: Applied Materials, Inc.			
WARD, MICHAEL A. Additional name(s) of conveying party(ies) attached?Yes _X No	A Corporation of the State of Delaware			
3. Nature of conveyance: X Assignment Merger	Street Address: 3050 Bowers Ave			
Security Agreement Change of Name Other	Internal Address: M/S 2061			
Execution Date: SEE ABOVE	City: Santa Clara State: CA zip: 95054			
	Additional name(s) & address(es) attached? Yes _X_ No			
4. Application number(s) or registration number(s): If this document is being filed together with a new application, the execution date of the application is: 06.250/ (Date of Filing) A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? _ Yes X No				
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:			
Name: APPLIED MATERIALS, INC	7. Total fee (37 C.F.R. 3.41)			
Internal Address: PATENT COUNSEL, M/S 2061	Enclosed X Authorized to be charged to deposit account			
Street Address: P.O. Box 450-A	50-1074			
City: Santa Clara State: CAzip: 95052	8. Deposit account number: 50-1074			
DO NOT USE THIS SPACE				
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any adached copy tyla true copy of the original document. ROBERT W. MULCAHY Reg. No. 25,436				
Name of Person Signing Signature Date				
Total number of pages including cover sheet, attachments and document: 3				

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J:\FORMS\272 (AUGUST 20, 1993)

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

1)	ASHER KLATCHKO, Inventor	2)	SAMUEL C. HOWELLS, Inventor
	4324 SE 28 th Ave.		6418 SW Virginia Ave.
	Portland, OR 97202	1	Portland, OR 97201
3)	MICHAEL A. WARD, Inventor		
	3941 SW 43 rd Ave.		
	Portland, OR 97221		

(hereinafter referred to as Assignors), have invented a certain invention entitled:

AN ALGORITHM FOR ADJUSTING EDGES OF GRAYSCALE PIXEL-MAP IMAGES

for which application for Letters Patent in	the United States was filed HEREWITH
under Serial No.	, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

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

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary of desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said

1 of 2

PATENT REEL: 011992 FRAME: 0919 Assignors in providing such cooperation shall be paid for by said Assignee.

- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said

Assignee on the dates indicated below.

1) June 25, 2001_

ASHER KLATCHKO, Inventor

2) Jine 25, 2001_

SAMUEL C. HOWELLS, Inventor

3) 25 JUN 2001

RECORDED: 07/11/2001

MICHAEL A. WARD, Invento