U.S. PT 12/45785	58
O6/24/20       Form PTO-1595 (Rev. 03-09)       OMB No. 0651-0027 (exp. 03/31/2009)       O7 - 06 - 2	U.S. DEPARTMENT OF COMMERCE
To the Director of the U.S. Patent a 1035661	QA i documents or the new address(es) below.
1. Name of conveying party(ies):	2. Name and address of receiving party(les)
Heman K. GALA	Name: SONY CORPORATION
	Internal Address: 1-7-1 Konan, Minato-ku
Additional name(s) of conveying party(ies) attached?	Street Address:
3. Nature of conveyance/Execution Date(s):	
Execution Date(s): June 23, 2009	
X Assignment Merger Change of Name	
	City:Tokyo
Government Interest Assignment	State:
Executive Order 9424, Confirmatory License	Country: JAPAN Zip: 108-0075
Other	Additional name(s) & address(es) XYes No attached?
4. Application or patent number(s):	This document is being filed together with a new application. B. Patent No.(s) Yes XNo
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and 1
Name: Christopher M. Tobin RADER, FISHMAN & GRAUER PLLC	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00
Internal Address: Atty. Dkt.: SOA-0446 Street Address: 1233 20th Street, N.W. Suite 501	X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)
City: Washington	8. Payment Information
State: DC Zip: 20036	
Phone Number: (202) 955-3750	
Fax Number: (202) 955-3751	Deposit Account Number 18-0013
Email Address: cmt@raderfishman.com	Authorized User Name Christopher M. Tobin
9. Signature:	87/82/2889 DBYRNE 9080824188929 1245785
Christopher M. Tobin - 40,290 Brian K. Dutton - 47,255	01 FC:8021 49.09 DA Total number of pages including cover 2 sheet, attachments, and documents: 2
Name of Person Signing	

PATENT REEL: 022912 FRAME: 0994

RECORDATION FORM COVER SHEET (PTO-1595) (supplemental sheet)				
Additional Conveying Party(ies)/Execution Date(s) (1. Continued):				
Additional Assignees (2. Continued):				
Assignee Name: SONY ELECTRONICS INC.				
Internal Address: Street Address: 1 Sony Drive				
City: Park Ridge State: New Jerse	y Country:United States of America	Zip: <u>07656</u>		
Assignee Name:				
Internal Address: Street Address:				
City: State:	Country:	Zip:		
Assignee Name:				
Internal Address:				
Street Address:				
City: State:	Country:	Zip:		
Additional Applications and/or Patents (4. Continued):				
Additional Patent Application Numbers	Additional Patent Numbers 4B. Continued:			
Additional numbers attached? Yes No				

Docket No.: SOA-0446

Assignment Docket No.: SOA-0446

## ASSIGNMENT

WHEREAS, I, as a below named inventor, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in

## PIPELINED IMAGE PROCESSING ENGINE

for which application for Letters Patent of the United States of America was executed by me on the date indicated next to my name and address;

AND WHEREAS, SONY CORPORATION, a Japanese corporation with offices at 1-7-1 Konan, Minato-ku, Tokyo Japan 108-0075 and SONY ELECTRONICS INC., a Delaware corporation with offices at 1 Sony Drive, Park Ridge, New Jersey 07656 U.S.A. (hereinafterreferenced as ASSIGNEES) is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEES, its successors, assigns, and legal representatives, theentire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Letters Patent to said ASSIGNEES, as the assignees of the whole right, title and interest thereto;

And I further agree to execute all necessary or desirable and lawful futurelocuments, including assignments in favor of ASSIGNEES or its designee, as ASSIGNEES or its successors, assigns and legal representatives may from timeto-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to properly execute and deliver and without further remuneration, such necessary

## PATENT REEL: 022912 FRAME: 0996

Assignment Docket No.: SOA-0446

11. J. 19.5

or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEES thereof shall hereafter require and prepare at its own expense;

In the second sec

And I further agree that ASSIGNEES will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

And I hereby authorize and request my attorney(s) of record in this application to insert the execution date, serial number and filing date of this application in the spaces that follow:

2

Serial Number:\_\_\_\_\_, Filing Date:\_\_\_\_\_.

This assignment is being executed on the date indicated below.

Heman K. GALA (First/Sole Inventor)

Dated: 06-23-200

Schaumburg, IL (Residence of First Named Inventor) Form PTO-1595 (Rev. 03-09) OMB No. 0651-0027 (exp. 03/31/2009) U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

PATENTS ONLY     To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address (eta)     1. Name of conveying party(ies):   2. Name and address of receiving party(ies)     Heman K. GALA   SONK CORPORATION	es) below.			
1. Name of conveying party(ies):   2. Name and address of receiving party(ies)     Heman K, GALA	es) below.			
1. Name of conveying party(ies):   2. Name and address of receiving party(ies)     Heman K, GALA				
Heman K GALA				
Name: SONY CORPORATION				
Internal Address: <u>1-7-1 Konan, Minato-ku</u>	Internal Address: 1-7-1 Konan, Minato-ku			
Additional name(s) of conveying party(ies) attached? Yes X No Street Address:	Street Address:			
3. Nature of conveyance/Execution Date(s):				
Execution Date(s): June 23, 2009				
X Assignment Merger Change of Name				
Security Agreement Joint Research Agreement City: Tokyo				
Government Interest Assignment State:	State:			
Executive Order 9424, Confirmatory License Country: JAPAN Zip: 10	Country: JAPAN Zip: 108-0075			
Other Additional name(s) & address(es) X Yes attached?	No			
4. Application or patent number(s):	ication.			
A. Patent Application No.(s)   B. Patent No.(s)				
THIS APPLICATION				
THIS APPLICATION				
Additional numbers attached?				
5. Name and address to whom correspondence   6. Total number of applications and patents involved:	1			
Name:     Christopher M. Tobin       RADER, FISHMAN & GRAUER PLLC     7. Total fee (37 CFR 1.21(h) & 3.41)	0.00			
Internal Address: Atty. Dkt.: SOA-0446				
Street Address: 1233 20th Street, N.W.	int			
Suite 501				
None required (government interest not at	fecting title)			
City: Washington 8. Payment Information				
State: DC Zip: 20036				
Phone Number: (202) 955-3750				
Fax Number:     (202) 955-3751     Deposit Account Number     18-0013				
Email Address: cmt@raderfishman.com Authorized User Name Christopher M. T	Authorized User Name Christopher M. Tobin			
9. Signature:				
June 24, 200	9			
Christopher M. Tobin - 40,290 Total number of pages including cover	<sup>ar</sup> 2			
Brian K. Dutton - 47,255 sheet, attachments, and documents: Name of Person Signing				

PATENT REEL: 022912 FRAME: 0998

RECORDATION FORM COVER SHEET (PTO-1595) (supplemental sheet)				
Additional Conveying Party(ies)/Execution Date(s) (1. Continued):				
Additional Assignees (2. Continued):				
Assignee Name: SONY ELECTRONICS INC.				
Internal Address: Street Address: 1 Sony Drive				
City: Park Ridge State: New Jersey	Country: United States of America	Zip: <u>07656</u>		
Assignee Name: Internal Address: Street Address:				
City: State:	Country:	Zip:		
Assignee Name: Internal Address: Street Address:				
City: State:	Country:	Zip:		
Additional Applications and/or Patents (4. Continued):				
Additional Patent Application Numbers 4A. Continued:	Additional Patent Numbers 4B. Continued:			
Additional numbers attached?	Yes No			