

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
Yuyu LIU	01/01/2010
Keisuke YAMAOKA	12/15/2009
Takayuki YOSHIGAHARA	12/15/2009
Xi CHEN	01/09/2010

**RECEIVING PARTY DATA**

Name:	SONY CORPORATION
Street Address:	1-7-1 Konan, Minato-ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	108-0075

**PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	12613899

**CORRESPONDENCE DATA**

Fax Number: (202)408-4400  
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*  
 Phone: 202-408-4000  
 Email: shaunette.mccoy@finnegan.com  
 Correspondent Name: FINNEGAN, HENDERSON, FARABOW, GARRETT &  
 Address Line 1: 901 NEW YORK AVENUE, NW  
 Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20001-4413

ATTORNEY DOCKET NUMBER:	09812.1796-00000
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NAME OF SUBMITTER:	Shaunette E. McCoy
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Total Attachments: 4  
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OP \$40.00 12613899

**501072137**

**PATENT  
 REEL: 023826 FRAME: 0687**

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**ASSIGNMENT**

WHEREAS, I, as below named inventors, residing at the addresses stated next to our names, 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 **IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, AND PROGRAM**

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 (hereinafter referred to as ASSIGNEE) 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 ASSIGNEE, its successors, assigns, and legal representatives, the entire 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 ASSIGNEE, as the assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-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 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 ASSIGNEE thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEE 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 serial number and filing date of this application in the spaces that follow: Serial Number: 12/613,899, Filing Date: November 6, 2009

This assignment executed on the dates indicated below.

YUYU LIU  
Name of first or sole inventor  
TOKYO JAPAN  
Residence of First or sole inventor  
*Yuyu Liu*  
Signature of first or sole inventor

\_\_\_\_\_  
Execution date of U.S. Patent Application  
Jan 1, 2010  
Date of this assignment

KEISUKE YAMAOKA  
Name of second inventor  
TOKYO JAPAN  
Residence of second inventor  
\_\_\_\_\_  
Signature of second inventor

\_\_\_\_\_  
Execution date of U.S. Patent Application  
\_\_\_\_\_  
Date of this assignment

TAKAYUKI YOSHIGAHARA  
Name of third inventor  
TOKYO JAPAN  
Residence of third inventor  
\_\_\_\_\_  
Signature of third inventor

\_\_\_\_\_  
Execution date of U.S. Patent Application  
\_\_\_\_\_  
Date of this assignment

**ADDITIONAL INVENTOR(S)**

XI CHEN

Name of fourth inventor  
Zhejiang Province P.R.China  
Residence of fourth inventor

Execution date of U.S. Patent Application

Signature of fourth inventor

Date of this assignment

Name of fifth inventor

Execution date of U.S. Patent Application

Residence of fifth inventor

Signature of fifth inventor

Date of this assignment

Name of sixth inventor

Execution date of U.S. Patent Application

Residence of sixth inventor

Signature of sixth inventor

Date of this assignment

Name of seventh inventor

Execution date of U.S. Patent Application

Residence of seventh inventor

Signature of seventh inventor

Date of this assignment

Name of eighth inventor

Execution date of U.S. Patent Application

Residence of eighth inventor

Signature of eighth inventor

Date of this assignment

Name of ninth inventor

Execution date of U.S. Patent Application

Residence of ninth inventor

Signature of ninth inventor

Date of this assignment

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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 ASSIGNEE, its successors, assigns, and legal representatives, the entire 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 ASSIGNEE, as the assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-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 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 ASSIGNEE thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEE 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 serial number and filing date of this application in the spaces that follow: Serial Number: \_\_\_\_\_, Filing Date: \_\_\_\_\_.

This assignment executed on the dates indicated below.

YUYU LIU  
Name of first or sole inventor  
TOKYO JAPAN  
Residence of First or sole inventor

\_\_\_\_\_  
Execution date of U.S. Patent Application

\_\_\_\_\_  
Signature of first or sole inventor

\_\_\_\_\_  
Date of this assignment

KEISUKE YAMAOKA  
Name of second inventor  
TOKYO JAPAN  
Residence of second inventor

\_\_\_\_\_  
Execution date of U.S. Patent Application

Keisuke Yamashita  
Signature of second inventor

Dec. 15, 2009  
Date of this assignment

TAKAYUKI YOSHIGAHARA  
Name of third inventor  
TOKYO JAPAN  
Residence of third inventor

\_\_\_\_\_  
Execution date of U.S. Patent Application

Takayuki Yoshigahara  
Signature of third inventor

December 15, 2009  
Date of this assignment

ADDITIONAL INVENTOR(S)

_____ XI CHEN Name of fourth inventor	_____ Execution date of U.S. Patent Application
_____ Zhejiang Province P.R.China Residence of fourth inventor	_____ Date of this assignment
_____ <i>Xi Chen</i> Signature of fourth inventor	_____ <i>Jan. 9, 2010</i> Date of this assignment
_____ Name of fifth inventor	_____ Execution date of U.S. Patent Application
_____ Residence of fifth inventor	_____ Date of this assignment
_____ Signature of fifth inventor	_____ Date of this assignment
_____ Name of sixth inventor	_____ Execution date of U.S. Patent Application
_____ Residence of sixth inventor	_____ Date of this assignment
_____ Signature of sixth inventor	_____ Date of this assignment
_____ Name of seventh inventor	_____ Execution date of U.S. Patent Application
_____ Residence of seventh inventor	_____ Date of this assignment
_____ Signature of seventh inventor	_____ Date of this assignment
_____ Name of eighth inventor	_____ Execution date of U.S. Patent Application
_____ Residence of eighth inventor	_____ Date of this assignment
_____ Signature of eighth inventor	_____ Date of this assignment
_____ Name of ninth inventor	_____ Execution date of U.S. Patent Application
_____ Residence of ninth inventor	_____ Date of this assignment
_____ Signature of ninth inventor	_____ Date of this assignment