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| <b>PATENT ASSIGNMENT COVER SHEET</b> |
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3385659

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                     |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                         |
| <b>CONVEYING PARTY DATA</b>   |                                    |
| <b>Name</b>   | <b>Execution Date</b>              |
| XUN XU  | 06/02/2015                         |
| PENG YE   | 06/03/2015                         |
| <b>RECEIVING PARTY DATA</b>   |                                    |
| <b>Name:</b>  | SONY CORPORATION                   |
| <b>Street Address:</b>  | 1-7-1 KONAN, MINATO-KU             |
| <b>City:</b>  | TOKYO                              |
| <b>State/Country:</b>   | JAPAN                              |
| <b>Postal Code:</b>   | 108-0075                           |
| <b>PROPERTY NUMBERS Total: 1</b>  |                                    |
| <b>Property Type</b>  | <b>Number</b>                      |
| <b>Application Number:</b>  | 14732551                           |
| <b>CORRESPONDENCE DATA</b>  |                                    |
| <b>Fax Number:</b>  | (650)842-0304                      |
| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i> |                                    |
| <b>Phone:</b>   | 6508420300                         |
| <b>Email:</b>   | docket@trellislaw.com              |
| <b>Correspondent Name:</b>  | TRELLIS IP LAW GROUP               |
| <b>Address Line 1:</b>  | 1900 EMBARCADERO ROAD, SUITE 109   |
| <b>Address Line 4:</b>  | PALO ALTO, CALIFORNIA 94303        |
| <b>ATTORNEY DOCKET NUMBER:</b>  | 020699-109100US                    |
| <b>NAME OF SUBMITTER:</b>   | MEGAN GODSEY FOR SHALINI VENKATESH |
| <b>SIGNATURE:</b>   | /Megan A. Godse/                   |
| <b>DATE SIGNED:</b>   | 06/05/2015                         |
| <b>Total Attachments: 3</b>   |                                    |
| source=020699-109100US-20140538201-SignedAssignments#page1.tif  |                                    |
| source=020699-109100US-20140538201-SignedAssignments#page2.tif  |                                    |
| source=020699-109100US-20140538201-SignedAssignments#page3.tif  |                                    |

ASSIGNMENT

WHEREAS, I, as a below named inventor, am a sole inventor or a joint inventor of certain new and useful improvements in **BANDING PREDICTION FOR VIDEO ENCODING** 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 WHEREAS, Sony Corporation, a Japanese corporation with offices at 1-7-1 Konan, Minato-ku, Tokyo, 108-0075, Japan (hereinafter referenced 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 therefore 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, 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 ASSIGNEES, as the assignees 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 ASSIGNEES or its designee, as ASSIGNEES 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 ASSIGNEES thereof shall hereafter require and prepare at its own expense;

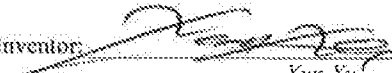
And I further agree that ASSIGNEES will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in 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: Serial Number: \_\_\_\_\_, Filing Date: \_\_\_\_\_;

This assignment is being executed on the date indicated below.

Date: 6/2/2015

Inventor:   
Xun Xu

Date: \_\_\_\_\_

Inventor: \_\_\_\_\_  
Peng Ye

# CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of Santa Clara }

On Jun 2 2015 before me, Yu-Ching Hsu, Notary Public  
(Here insert name and title of the officer)

personally appeared Xun Xu

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

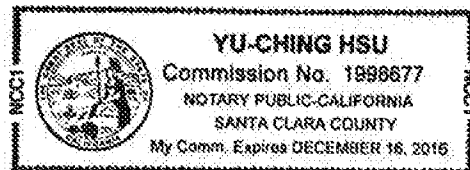
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

*[Handwritten Signature]*

Notary Public Signature

(Notary Public Seal)



### ADDITIONAL OPTIONAL INFORMATION

#### DESCRIPTION OF THE ATTACHED DOCUMENT

Assignment Docket # 020699-109/045  
(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages 1 Document Date 2015.6.1

#### CAPACITY CLAIMED BY THE SIGNER

- Individual (s)  
 Corporate Officer

\_\_\_\_\_  
(Title)

- Partner(s)  
 Attorney-in-Fact  
 Trustee(s)  
 Other \_\_\_\_\_

### INSTRUCTIONS FOR COMPLETING THIS FORM

*This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.*

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he~~/she/~~they~~ - is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

Docket No. 020699-109100US  
Sony ID No. 201405382.01

ASSIGNMENT

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AND WHEREAS, **Sony Corporation, a Japanese corporation with offices at 1-7-1 Konan, Minato-ku, Tokyo, 108-0075, Japan** (hereinafter referenced 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 therefore 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, 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 ASSIGNEES, as the assignees 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 ASSIGNEES or its designee, as ASSIGNEES 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 ASSIGNEES thereof shall hereafter require and prepare at its own expense;

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;

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This assignment is being executed on the date indicated below.

Date: \_\_\_\_\_

Inventor: \_\_\_\_\_  
*Xun Xu*

Date: 06/03/2015

Inventor: Peng Ye  
*Peng Ye*