# 505375845 03/14/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5422638

SUBMISSION TYPE:		NEW ASSIGN	MENT			
NATURE OF CONVEYANCE:		ASSIGNMENT				
	-					
CONVEYING PARTY	DATA					
		Name			Execution Date	
HYE-YEON CHEONG				03/08/2019		
ALI TABATABAI					02/21/2019	
RECEIVING PARTY I	DATA					
Name:	SONY	CORPORATION				
Street Address:	1-7-1 K	ONAN, MINATO-KU				
City:	ΤΟΚΥΟ	)				
State/Country:	JAPAN	JAPAN				
Postal Code:	108-00	75				
		16194357	4357			
Property TypeApplication Number:16194		16194357	<b>Number</b> 4357			
CORRESPONDENCE						
Fax Number:		(408)530-9797				
Correspondence will	l be sent to	the e-mail address				
using a fax number,	•		sful, it will be se	nt via US N	fail.	
Phone: Email:		408-530-9700 jowens@hollp.com				
Correspondent Nam		HAVERSTOCK & OV	VENS LLP			
Address Line 1: 162 N. WOLFE ROAD						
Address Line 4:						
ATTORNEY DOCKET NUMBER: SONY-70600						
NAME OF SUBMITTER:		JONATHAN O	JONATHAN O. OWENS			
SIGNATURE:		/Jonathan O. C	/Jonathan O. Owens/			
DATE SIGNED:		03/14/2019	03/14/2019			
Total Attachments: 4		•				
source=Assignment_3_		-				
source=Assignment_3_14_2019#page2.tif						

source=Assignment\_3\_14\_2019#page3.tif source=Assignment\_3\_14\_2019#page4.tif

## Attorney Docket No.: SONY-70500

### ASSIGNMENT

WHEREAS, I, as a below named inventor, am a joint inventor of certain new and useful improvements in <u>SUB-BLOCK BASED ENTROPY CODING FOR IMAGE CODING</u> for which application for Letters Patent of the United States of America was executed by me on the date indicated next to my name;

Application Serial No: 16/194.357

Filed Date: November 18, 2018

AND WHEREAS, Sony Corporation, a Japanese corporation with offices at 1-7-1 Konan, Minato-ku, Tokyo, 108-0075, Japan (hereinafter referenced as ASSIGNEE(S) is desirous of securing 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 return for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged. I, as a cole 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 any foreign countries, 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 or any foreign country 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 Letters Patent to said ASSIGNEES, as the assignces of the whole right, title and interest thereto;

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 foreign countries;

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 their own expense;

I further agree that ASSIGNEES will, upon their 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;

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

I further agree that this Assignment shall be deemed to have been made and executed in the State of Delaware and any dispute arising hereunder not governed by US federal law will be resolved in accordance with the laws of the State of Delaware without reference to its conflict of law principles. Thereby consent and submit to the jurisdiction of the federal and state courts located in the State of Delaware. Any action or suit under this Agreement or otherwise arising from the relationship between the parties will only be brought in any federal or state court with

## PATENT REEL: 048602 FRAME: 0923

appropriate jurisdiction over the subject matter hereof sitting in the State of Delaware. 1 WILL NOT RAISE IN CONNECTION HEREWITH, AND HEREBY WAIVE, TRIAL BY JURY AND/OR ANY DEFENSES BASED UPON THE VENUE, THE INCONVENIENCE OF THE FORUM. THE LACK OF PERSONAL JURISDICTION, THE SUFFICIENCY OF SERVICE OF PROCESS OR THE LIKE IN ANY ACTION OR SUIT ARISING FROM SUCH DISPUTE;

I agree that all my obligations hereunder shall survive any termination of my employment and shall be binding on my heirs, executors, administrators, or other legal representatives or assigns;

This assignment is being executed on the date indicated below.

Inventor:

Oh CL	
Hye-Yeon Chéong	·····

Date:	3/8/	2019

Inventor:

Ali Tabatabai

Date:

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		
COUNTY OF		
	and the second	
On before	me,	
(Date)	(name and title) (notary public)	1
personally appeared		
	<pre>// name(s) of signer(s)</pre>	*******

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 office seal.

Notary Public

Page 1

#### Attorney Docket No : SONY-70600

#### ASSIGNMENT

WHEREAS, I, as a below named inventor, am a joint inventor of certain new and useful improvements in <u>SUB-BLOCK BASED ENTROPY CODING FOR IMAGE CODING</u> for which application for Letters Patent of the United States of America was executed by me on the date indicated next to my name;

Application Serial No: 16/194,357 Filed Date: November 18, 2018

AND WHEREAS, Sony Corporation, a Japanese corporation with offices at 1-7-1 Konan, Minato-ku, Tokyo, 108-0075, Japan (hereinafter referenced as ASSIGNEE(S) is desirous of securing 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 return for 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 any foreign countries, 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 or any foreign country 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 Letters Patent to said ASSIGNEES, as the assignces of the whole right, title and interest to issue the said United States Letters Patent to said ASSIGNEES, as the assignces of the whole right, title and interest thereto;

I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of 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 foreign countries;

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 their own expense:

I further agree that ASSIGNEES will, upon their 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;

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

I further agree that this Assignment shall be deemed to have been made and executed in the State of Delaware and any dispute arising hereunder not governed by US federal law will be resolved in accordance with the laws of the State of Delaware without reference to its conflict of law principles. I hereby consent and submit to the jurisdiction of the federal and state courts located in the State of Delaware. Any action or suit under this Agreement or otherwise arising from the relationship between the parties will only be brought in any federal or state court with

#### PATENT

## PATENT REEL: 048602 FRAME: 0925

appropriate jurisdiction over the subject matter hereof sitting in the State of Delaware. I WH.L. NOT RAISE IN CONNECTION HEREWITH, AND HEREBY WAIVE, TRIAL BY JURY AND/OR ANY DEFENSES BASED UPON THE VENUE, THE INCONVENIENCE OF THE FORUM, THE LACK OF PERSONAL JURISDICTION, THE SUFFICIENCY OF SERVICE OF PROCESS OR THE LIKE IN ANY ACTION OR SUIT ARISING FROM SUCH DISPUTE;

I agree that all my obligations hereunder shall survive any termination of my employment and shall be binding on my heirs, executors, administrators, or other legal representatives or assigns;

This assignment is being executed on the date indicated below.

Inventor:	Hye-Yeon Cheong	Date:		
Inventor	Ali Tabatabai	Date:	2/21/2019	
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				
On 101 21 201 before me, <u>You (hing Y Su Matary Pu</u> blic) (Date) (name and (ittle) (notary public)				
personally appeared ////////////////////////////////////				

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 this/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 office seal

Notary Public



Page 1

PATENT REEL: 048602 FRAME: 0926

**RECORDED: 03/14/2019**