PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mark Robertson	10/21/2010
Ming-Chang Liu	10/21/2010
Yoshihiro Murakami	10/25/2010
Toru Kurata	10/25/2010
Yutaka Yoneda	10/25/2010

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:	12912536

CORRESPONDENCE DATA

Fax Number: (408)530-9797

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

408-530-9700 Phone:

Email: JOWENS@HOLLP.COM Correspondent Name: **HAVERSTOCK & OWENS LLP**

Address Line 1: 162 N WOLFE ROAD

Address Line 4: SUNNYVALE, CALIFORNIA 94086

ATTORNEY DOCKET NUMBER:	SONY-42800
NAME OF SUBMITTER:	Jonathan O. Owens

REEL: 025198 FRAME: 0402

PATENT

501331597

Total Attachments: 2

source=Assignment_10_26_2010#page1.tif source=Assignment_10_26_2010#page2.tif

> PATENT REEL: 025198 FRAME: 0403

Attorney Docket No.: <u>SONY-42800</u>

ASSIGNMENT

WHEREAS, WE, Mark Robertson, Ming-Chang Liu, Yoshihiro Murakami, Toru Kurata and Yutaka Yoneda, hereinafter referred to as "ASSIGNORS", have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:	METHOD TO INCREASE TH BIT-PRECISION CIRCUMST	<u>IE ACCURACY OF PHASE (ANCES</u>	ORRELATION MOTION ESTIMAT	<u>ΓΙΟΝ IN LOW-</u>
Date of execution of	application:	Filing Date:	Serial No.:	
WHEREA referred to as "ASSIO which may be grante	AS, <u>SONY CORPORATION</u> , a Jag GNEE", is desirous of acquiring the ad on the same;	panese corporation, 1-7-1 Kona e entire right, title and interest is	n, Minato-ku, Tokyo 108-0075, JAPAN n said invention and application and in a	I,hereinafter any Letters Patent
which is hereby ackr Assignee, and Assign Patent, and any Lette any divisions, renew to be held and enjoye	nowledged, Assignors have sold, as nee's successors and assigns, all rig ers Patent which may hereafter be go als, continuations in whole or in w	ssigned and transferred, and by ght, title and interest in and to sa granted on the same in the Unite art, substitutions, conversions, r colusively as it would have beer colusively as it would have beer	that, for good and valuable consideration these presents do sell, assign and transfer id invention, said application for United States and all countries throughout the issues, prolongations or extensions the held and enjoyed by said Assignors has	er unto said d States Letters e world including reof, said interest
prosecution of said a Letters Patent and fo lawfully may request	pplication and/or applications, exe	cute, verify, acknowledge and onto	at Assignee's expense, cooperate with A leliver all such further papers, including lereof, and will perform such other acts wement in any and all countries, and to	applications for as Assignee
IN TESTI	MONY WHEREOF, Assignors ha	ve hereunto signed their names	to this assignment on the dates indicate	d below.
MU.T	Mark Robertson		21 October 2010	
	Mark Robertson		Date	
	Total Xin	.3	Oct >1, >010	
	Ming-Chang Liu		Date	
	Yoshihiro Murakami		Date	
	Toru Kurata		Date	
	77 . 1 . 37 1		Date	
	Yutaka Yoneda		Date	
STATE OF Ca	Legenee			
COUNTY OF	nte Clara	a little feen	a notary public, pe	mana llu annograd
Mark Robertson, Mir	vhose name(s) is/are subscribed to ed capacity(ies), and that by his/he	Toru Kurata and Yutaka York	, a hotaly public, be detailed, who proved to me on the basis of sat mowledged to me that he/she/they execute the person(s), or the entity upon be	isfactory evidence cuted the same in
I certify under PENA	LTY OF PERJURY under the law	s of the State of California that	the foregoing paragraph is true and corr	ect.
		WITNESS my hand	and official seal.	
20000		- 1/5		
SEAL	PAULETTE L. FERNANDEZ Gommission # 1870555 Notary Public - California	S S	gnature of Notary Public	

Santa Clara County My Comm. Expires Dec 2, 2013

PATENT

REEL: 025198 FRAME: 0404

Attorney Docket No.: $\frac{\underline{PATENT}}{\underline{SONY42800}}$

ASSIGNMENT

WHEREAS, WE, Mark Robertson, Ming-Chang Liu, Yoshihiro Murakami, Toru Kurata and Yutaka Yoneda, hereinafter referred to as "ASSIGNORS", have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: METHOD TO INCREASE THE ACCUI	RACY OF PHASE CO	ORRELATION MOTION ESTIMATION IN LOW-
Date of execution of application:	Filing Date:	Serial No.:
WHEREAS, SONY CORPORATION, a Japanese correferred to as "ASSIGNEE", is desirous of acquiring the entire rig which may be granted on the same;	poration, 1-7-1 Konan, ht, title and interest in	Minato-ku, Tokyo 108-0075, JAPAN, hereinafter said invention and application and in any Letters Patent
NOW THEREFORE, TO ALL WHOM IT MAY CON which is hereby acknowledged, Assignors have sold, assigned and Assignee, and Assignee's successors and assigns, all right, title and Patent, and any Letters Patent which may hereafter be granted on any divisions, renewals, continuations in whole or in part, substitute be held and enjoyed by said Assignee as fully and exclusively a and transfer not been made, to the full end and term of any Letters	I transferred, and by the dinterest in and to said the same in the United utions, conversions, relies it would have been he s Patent.	ese presents do sell, assign and transfer unto said invention, said application for United States Letters States and all countries throughout the world including ssues, prolongations or extensions thereof, said interest eld and enjoyed by said Assignors had this assignment
Assignors further agree that they will, without charge t prosecution of said application and/or applications, execute, veriff Letters Patent and for the reissue thereof, and instruments of assig lawfully may request, to obtain or maintain Letters Patent for said said Assignee, or Assignee's successors and assigns.	y, acknowledge and del	iver all such further papers, including applications for reof, and will perform such other acts as Assignee
IN TESTIMONY WHEREOF, Assignors have hereunt	o signed their names to	this assignment on the dates indicated below.
Mark Robertson	-	Date
Ming-Chang Liu Yoshihiro Murakami Yoshihiro Murakami	- , ,	October 25th, 2010
Tohnikurasa Toru Kurata	_	Ocretor 25th, 2010
Mutable Moneda Yutaka Yoneda	_	Detoper 25th, 2010
STATE OF		
COUNTY OF		
On before me, Mark Robertson, Ming-Chang Liu, Yoshihiro Murakami, Toru Ku to be the person(s) whose name(s) is/are subscribed to the with his/her/their authorized capacity(ies), and that by his/her/their sig person(s) acted, executed the instrument.	in instrument and acki	mwienpen in me mai ne sne/mev executed the same n
I certify under PENALTY OF PERJURY under the laws of the St	ate of California that th	ne foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SEAL RECORDED: 10/26/2010

PATENT

SignaturRE Lary 025198 FRAME: 0405