Form PTO-1595 (Rev. 03-11) OMB No. 0651-0027 (exp. 03/31/2015)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office			
RECORDATION FORM COVER SHEET PATENTS ONLY				
To the Director of the U.S. Patent and Trademark Office: Please	e record the attached documents or the new address(es) below.			
1. Name of conveying party(les):	2. Name and address of receiving party(les)			
Kazuhito Shimoda (12/07/2009), Shinichi Fujii (12/08/2009), Yasutoshi Katsuda (12/15/2009), Hiroki Ui (12/21/2009), and Additional name(s) of conveying party(les) attached?	Name: Sony Corporation Internal Address: Street Address:			
3. Nature of conveyance/Execution Date(s):	1-7-1 Konan, Minato-ku			
Execution Date(s): in parentheses after inventor name X Assignment Merger Change of Name	Tokyo 108-0075 JAPAN			
Security Agreement Joint Research Agreement	City:			
Government Interest Assignment	State:			
Executive Order 9424, Confirmatory License	Country: Zip:			
Other	Additional name(s) & address(es) Yes X No attached?			
A. Patent Application No.(s) 13/670,201 Additional numbers attached	B. Patent No.(s)			
Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:			
Name: Bruno Polito LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address; Atty. Dkt.:	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00			
Street Address: 600 South Avenue West	Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)			
City: Westfield	8. Payment Information			
State: NJ Zip: 07090	•			
Phone Number: 908-654-5000				
Fax Number: 908-654-7866	Deposit Account Number 12-1095			
Email Address: ataylor@ldlkm.com	Authorized User Name Bruno Polito			
8. Signature: Signature	March 8, 2013			
Bruno Polito - 38,580	Total number of pages including cover sheet, attachments, and documents:			
Name of Person Signing	secretary gaymous erroutified adition behind the sale to the			

PATENT REEL: 029979 FRAME: 0329

- 1	•		K
	11	ł	К. 1
	~	-	13

Additional Conveying Party(ies)/Execution Date(s) (1. Continued):				
Vistalia Makinsun (40/00/0000)				
Yutaka Nishimura (12/22/2009)				
Additional Assignees (2. Continued):	·····			
Assignee Namo				
Assignee Name: Internal Address:				
Street Address:				
Clty: State: Country: Zip:				
Assignée Name:				
Internal Address:				
Street Address:				
City: State: Country: Zip:				
Assignee Name:				
Internal Address:				
Street Address:				
City: State: Country: Zip: _	Hitting with the same of the s			
Additional Applications and/or Patents (4. Continued):				
Additional Patent Application Numbers Additional Patent Numbers				
4A. Continued: 4B. Continued:				
Additional numbers attached? Yes No				

2

Docket No.:

Attorney Docket No. SONYJP3.0-2104 SONY Ref. No.: S10P0071US00

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 PICKUP ELEMENT AND IMAGE PICKUP DEVICE

LDLKM

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 WHERBAS, SONY CORPORATION, a Japanese corporation, with offices at 1-7-1 Konan, Minato-kn, 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 filling of applications for patents or accuring 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 logal 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 fureign 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 filling 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 ASSKINEE thereof shall be reafter 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.	
KAZUHITO SHIMODA	Decombor 7. 2009
Name of first or sole inventor KYOTO JAPAN	Execution date of U.S. Patent Application
Residence of First or sole inventor	
Signature of first or sole inventor	Date of this assignment
Signature of first or sole inventor	Date of this assignment
SHINICHI FUITI	December 8, 2009
Name of second inventor	Execution date of U.S. Patent Application
OSAKA JAPAN	
Residence of second inventor,	December 8, 2009
Signature of second inventor	Date of this assignment
YASUTOSHI KATSUDA	Execution date of U.S. Patent Application
Name of third inventor	Execution date of U.S. Patent Application
OSAKA JAPAN	
Residence of third inventor	
Hospitati Datenda	december 15, 2009
Signature of third inventor	Date of this assignment

PATENT REEL: 029979 FRAME: 0331

Attorney Docket No. SONYJP3.0-2104 SONY Ref. No.;S10P0071US00

ADDITIONAL INVENTOR(S)

LDLKM

HIROKI UI	Accember 21, 2009
Name of fourth inventor	Execution date of U.S. Patent Application
TOKYO JAPAN	
Residence of fourth inventor	
Signature of fourth inventor	Date of this assignment
Signature of fourth inventor	Date of this assignment
YUTAKA NISHIMURA	Paralle SS Sa G
Name of fifth inventor	Execution date of U.S. Patent Application
KANAGAWA JAPAN	Execution date of 0.5. Patent Application
Residence of fifth inventor	VV 99**********************************
Tutaka Nidimura	Decouper 32 SAA 9
Signature of fifth inventor	Date of this assignment
	<u>. </u>
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

PATENT REEL: 029979 FRAME: 0332

RECORDED: 03/08/2013