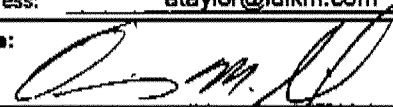


Form PTO-1595 (Rev. 03-11)
OMB No. 0651-0027 (exp. 03/31/2012)

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 record the attached documents or the new address(es) below.

<p>1. Name of conveying party(ies): Hiroaki Fujii (04/23/2012), Satoshi Mukoyama (04/23/2012), Soya Araki (04/24/2012), Hisanori Tsuboi (04/24/2012), and</p> <p>Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies) Name: <u>Sony Corporation</u></p> <p>Internal Address: _____</p> <p>Street Address: _____</p> <p>1-7-1 Konan, Minato-ku Tokyo 108-0075 JAPAN</p> <p>City: _____</p> <p>State: _____</p> <p>Country: _____ Zip: _____</p> <p>Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance/Execution Date(s): Execution Date(s): In parentheses after inventor name</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement</p> <p><input type="checkbox"/> Government Interest Assignment</p> <p><input type="checkbox"/> Executive Order 9424, Confirmatory License</p> <p><input type="checkbox"/> Other _____</p>	<p>4. Application or patent number(s): <input type="checkbox"/> This document is being filed together with a new application.</p> <p>A. Patent Application No.(s) 13/470,528</p> <p>B. Patent No.(s)</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>5. Name and address to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Dennis M. Smid, Esq. LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP</u></p> <p>Internal Address: Atty. Dkt.: SONYJP 3.0-2784</p> <p>Street Address: <u>600 South Avenue West</u></p> <p>City: <u>Westfield</u></p> <p>State: <u>NJ</u> Zip: <u>07090</u></p> <p>Phone Number: <u>908-654-5000</u></p> <p>Fax Number: <u>908-654-7866</u></p> <p>Email Address: <u>ataylor@ldlkm.com</u></p>	<p>6. Total number of applications and patents involved: 1</p> <p>7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>40.00</u></p> <p><input checked="" type="checkbox"/> Authorized to be charged to deposit account</p> <p><input type="checkbox"/> Enclosed</p> <p><input type="checkbox"/> None required (government interest not affecting title)</p>
<p>9. Signature:</p> <p style="text-align: center;"></p> <p style="text-align: center;">_____ Signature</p> <p style="text-align: right;">_____ Date</p> <p style="text-align: center;">May 14, 2012</p> <p style="text-align: center;">Dennis M. Smid, Esq. - 34,930 Name of Person Signing</p>	
<p>Total number of pages including cover sheet, attachments, and documents: 4</p>	

CH \$40.00 121095 13470528

RECORDATION FORM COVER SHEET (PTO-1595) (supplemental sheet)	
Additional Conveying Party(ies)/Execution Date(s) (1. Continued): Hidetomo Miyake (04/25/2012)	
Additional Assignees (2. Continued):	
Assignee Name: _____	
Internal Address: _____	
Street Address: _____	
City: _____ State: _____ Country: _____ Zip: _____	
Assignee Name: _____	
Internal Address: _____	
Street Address: _____	
City: _____ State: _____ Country: _____ Zip: _____	
Assignee Name: _____	
Internal Address: _____	
Street Address: _____	
City: _____ State: _____ Country: _____ Zip: _____	
Additional Applications and/or Patents (4. Continued):	
Additional Patent Application Numbers 4A. Continued:	Additional Patent Numbers 4B. Continued:
Additional numbers attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Attorney Docket No. SONYJP 3.0-2784
SONY Ref. No.: SP332730US00

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
DISPLAY

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: 13/470,528, Filing Date: May 14, 2012.

This assignment executed on the dates indicated below.

HIROAKI FUJII

Name of first or sole inventor
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Residence of First or sole inventor

Hiroaki Fujii
Signature of first or sole inventor

Execution date of U.S. Patent Application

April 23, 2012
Date of this assignment

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Signature of second inventor

Execution date of U.S. Patent Application

April 23, 2012
Date of this assignment

SOYA ARAKI

Name of third inventor
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Residence of third inventor

Soya Araki
Signature of third inventor

Execution date of U.S. Patent Application

April 24, 2012
Date of this assignment

Attorney Docket No. SONYJP 3.0-2784
SONY Ref. No.:SP332730US00

ADDITIONAL INVENTOR(S)

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Execution date of U.S. Patent Application

April 24, 2012
Date of this assignment

HIDETOMO MIYAKE

Name of fifth inventor
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Residence of fifth inventor

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Signature of fifth inventor

Execution date of U.S. Patent Application

April 25, 2012
Date of this assignment

Name of sixth inventor

Residence of sixth inventor

Signature of sixth inventor

Execution date of U.S. Patent Application

Date of this assignment

Name of seventh inventor

Residence of seventh inventor

Signature of seventh inventor

Execution date of U.S. Patent Application

Date of this assignment

Name of eighth inventor

Residence of eighth inventor

Signature of eighth inventor

Execution date of U.S. Patent Application

Date of this assignment

Name of ninth inventor

Residence of ninth inventor

Signature of ninth inventor

Execution date of U.S. Patent Application

Date of this assignment