PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2654055

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KENICHI TAJIRI	09/08/2010
YUTAKA KOBASHI	08/06/2010
HIROSHI KIYA	08/06/2010
NOBUHIKO YOKOO	08/10/2010

RECEIVING PARTY DATA

Name:	Sony Corporation
Street Address:	1-7-1 Konan, Minato-ku
City:	Tokyo
State/Country:	JAPAN

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14096988

CORRESPONDENCE DATA

Fax Number: (312)827-8185 Phone: 312-372-1121

Email: chicago.patents@klgates.com

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

Correspondent Name: K&L GATES
Address Line 1: P.O. BOX 1135

Address Line 4: CHICAGO, ILLINOIS 60690-1135

ATTORNEY DOCKET NUMBER:	3724078-3466
NAME OF SUBMITTER:	JEFFREY M. INGALLS
Signature:	/Jeffrey M. Ingalls/
Date:	12/18/2013 PATENT

502607648 REEL: 031812 FRAME: 0362

14096988

CH \$40,00

Total Attachments: 4 source=Assignment1#page1.tif source=Assignment1#page2.tif source=Assignment1#page3.tif source=Assignment1#page4.tif

> PATENT REEL: 031812 FRAME: 0363

Attorney Docket No. SONY Ref. No.: S10P2204US00

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

LIQUID CRYSTAL DISPLAY DEVICE

Signature of third inventor

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: 12/884,758 _____, Filing Date: <u>September 17, 2010</u> This assignment executed on the dates indicated below. KENICHI TAJIRI Name of first or sole inventor Execution date of U.S. Patent Application NAGANO JAPAN Residence of First or sole inventor Fajiri Kenichi Date of this assignment Signature of first or sole inventor YUTAKA KOBASHI Name of second inventor Execution date of U.S. Patent Application NAGANO JAPAN Residence of second inventor Signature of second inventor Date of this assignment HIROSHI KIYA Name of third inventor Execution date of U.S. Patent Application NAGANO JAPAN Residence of third inventor

> PATENT REEL: 031812 FRAME: 0364

Date of this assignment

Attorney Docket No. SONY Ref. No.: S10P2204US00

ADDITIONAL INVENTOR(S)

NOBUHIKO YOKOO	
Name of fourth inventor NAGANO JAPAN	Execution date of U.S. Patent Application
Residence of fourth inventor	
Signature of fourth inventor	Date of this assignment
Name of fifth inventor	Execution date of U.S. Patent Application
Residence of fifth inventor	
Signature of fifth inventor	Date of this assignment
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

Attorney Docket No. SONY Ref. No.: S10P2204US00

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

LIQUID CRYSTAL DISPLAY DEVICE

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: 12/884,758	Filing Date: September 17, 2010
This assignment executed on the dates indicated below.	
KENICHI TAJIRI	
Name of first or sole inventor NAGANO JAPAN	Execution date of U.S. Patent Application
Residence of First or sole inventor	
Signature of first or sole inventor	Date of this assignment
YUTAKA KOBASHI	
Name of second inventor NAGANO JAPAN	Execution date of U.S. Patent Application
Residence of second inventor Yutaha Kahashi	2010. 3.6.
Signature of second inventor	Date of this assignment
HIROSHI KIYA	
Name of third inventor NAGANO JAPAN	Execution date of U.S. Patent Application
Residence of third inventor	
Hiroshi Kiya	2010. 8.6
Signature of third inventor	Date of this assignment

PATENT REEL: 031812 FRAME: 0366

Attorney Docket No. SONY Ref. No.: S10P2204US00

ADDITIONAL INVENTOR(S)

NOBUHIKO YOKOO	
Name of fourth inventor	Execution date of U.S. Patent Application
NAGANO JAPAN Residence of fourth inventor	
	August 10, 20/0
Nobuliko Yokoo Signature of fourth inventor	Date of this assignment
Name of fifth inventor	Execution date of U.S. Patent Application
Residence of fifth inventor	
Signature of fifth inventor	Date of this assignment
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
	English And CHO Date & And Handing
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: 031812 FRAME: 0367