410581-40

11/992967 IAP17 Rec o PCT/PTO UZ APR 2008

Form PTO-1595 (Rev. 08/05)

U.S. DEPARTMENT OF COMMERCE

REC 04 - 1	U - ZUUO nited States Patent and Trademark Office
To the Director of the U.S. Patent and Trad	496016nts or the new address(es) below.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies)
Katsuhide Uchino (03/11/2008) and Junichi Yamashita (03/11/2008)	Name: Sony Corporation
Additional name(s) of conveying party(ies) attached? Yes X No	Internal Address: Street Address:
3. Nature of conveyance/Execution Date(s):	1-7-1 Konan
Execution Date(s): in parentheses after inventor name	Minato-Ku, Tokyo 108-0075
X Assignment Merger Change of Name	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) This application	This document is being filed together with a new application. B. Patent No.(s) 11/992967
Additional numbers attached?	
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Christopher M. Tobin RADER, FISHMAN & GRAUER PLLC	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address: Atty. Dkt.: SON-3697	Authorized to be charged by credit card
Street Address: 1233 20th Street, N.W.	X Authorized to be charged to deposit account
Suite 501	Enclosed
	None required (government interest not affecting title)
dity: Washington	8. Payment Information
State: Do Zip: 20036	a. Credit Card Last 4 Numbers
Phone Number: (202) 955-3750	Expiration Date
Fax Number: (202) 955-3751	b. Deposit Account Number 18-0013
Email Address: cmt@raderfishman.com	Authorized User Name Christopher M. Tobin
9. Signature: Mo, 2	April 2, 2008 Date
Ronald P. Kananen - 24,104 Christopher M. Tobin – 40,290 Name of Person Signing	Total number of pages including cover sheet, attachments, and documents: 3

PATENT

REEL: 020788 FRAME: 0304

ASSIGNMENT

LAP17 Rec'd PCT/PTO 02 APR 2008

WHEREAS, I, as a below named inventor, residing at the address stated next to my name, 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 PIXEL CIRCUIT AND DISPLAY APPARATUS

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 referenced 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: International Application No.: PCT/JP2006/_____, International Filing Date: 11/14/2006 322653

This assignment executed on the dates indicated below.

Signature of first or sole inventor

Execution date of U.S. Patent Application
Mair 11, 20% A Date of this assignment
-

PATENT REEL: 020788 FRAME: 0305

Junichi YAMASHITA	
Name of second inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of second inventor	
Signature of second inventor	May 11. 2008 Date of this assignment
Signature of second inventor	Date of this assignment
•	
Name of third inventor	Execution date of U.S. Patent Application
Residence of third inventor	
Signature of third inventor	Date of this assignment
Name of fourth inventor	Execution data of U.S. Detant Application
Name of fourth inventor	Execution date of U.S. Patent Application
Residence of fourth inventor	· · · · · · · · · · · · · · · · · · ·
Residence of four til 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

PATENT REEL: 020788 FRAME: 0306

11/992967

IAP17 Rec'd PCT/PTO 02 APR 2008 United States Patent and Trademark Office

Form PTO-1595 (Rev. 08/05) OMB No. 0651-0027 (exp. 6/30/2008)

RECORDED: 04/02/2008

RECORDATION FOR	M 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.	
1. Name of conveying party(ies):	2. Name and address of receiving party(ies)	
Katsuhide Uchino (03/11/2008) and Junichi Yamashita (03/11/2008)	Name: Sony Corporation	
,	Internal Address:	
Additional name(s) of conveying party(ies) attached? Yes X No	Street Address:	
3. Nature of conveyance/Execution Date(s):	1-7-1 Konan	
Execution Date(s): in parentheses after inventor name	Minato-Ku, Tokyo 108-0075	
X Assignment Merger Change of Name	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?	
4. Application or patent number(s):	This document is being filed together with a new application.	
A. Patent Application No.(s)	B. Patent No.(s)	
This application		
• •		
Additional numbers attached?	Yes X No	
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:	
Name: Christopher M. Tobin RADER, FISHMAN & GRAUER PLLC	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00	
Internal Address: Atty. Dkt.: SON-3697	Authorized to be charged by credit card	
Street Address: 1233 20th Street, N.W.	X Authorized to be charged to deposit account	
Suite 501	Enclosed	
	None required (government interest not affecting title)	
City: Washington	8. Payment Information	
DC 7in: 20036	a. Credit Card Last 4 Numbers	
(000) 055 3750	Expiration Date	
(202) 055 3751	b. Deposit Account Number 18-0013	
Fax Number: (202) 935-3731 Email Address: cmt@raderfishman.com	Authorized User Name Christopher M. Tobin	
a dispersional		
9. Signature.		
Signature	Date	
Ronald P. Kananen - 24,104	Total number of pages including cover sheet, attachments, and documents:	
Christopher M. Tobin – 40,290 Name of Person Signing	Siloot, Alternative	
Name of Ferson Oighing		

PATENT

REEL: 020788 FRAME: 0307