OIPE	
()	
OCT 2 0 2006 Form PTO-1595 (Rev. 08/05) OMB No. 0651-0027 (exp. 6/30/2006)	10-25-2006 ARTMENT OF COMMERCE Patent and Trademark Office
10/20/10 PA	
To the Director of the U.S. Patent and Trademark Office: Please	103327024
Name of conveying party(ies):	2. Name and address of receiving party(ies)
Tomofumi Arakawa (9/26/2006) and Mutsuhiro Ohmori (9/19/2006)	Name: Sony Corporation
Additional name(s) of conveying party(ies) attached?	Internal Address: Street Address:
3. Nature of conveyance/Execution Date(s): Execution Date(s): in parentheses after inventor name X Assignment Merger Change of Name	7-35 Kitashinagawa 6-Chome Shinagawa-Ku, Tokyo 141-0001 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)	B. Patent No.(s)
11/499,730 Additional numbers attached?	
11/499,730 Additional numbers attached?	
11/499,730 Additional numbers attached? Name and address to whom correspondence concerning document should be mailed:	Yes X No 6. Total number of applications and
Additional numbers attached? Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597	Yes X No 6. Total number of applications and patents involved:
Additional numbers attached? Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597	Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed
Additional numbers attached? Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597 Street Address: 1233 20th Street, N.W. Suite 501	Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)
Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597 Street Address: 1233 20th Street, N.W. Suite 501 City: Washington	Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed
Additional numbers attached? Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597 Street Address: 1233 20th Street, N.W. Suite 501 City: Washington State: DC Zip: 20036	Find the following series of the following series involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information
Additional numbers attached? Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597 Street Address: 1233 20th Street, N.W. Suite 501 City: Washington State: DC Zip: 20036 Phone Number: (202) 955-3750 Fax Number: (202) 955-3751	Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number 18-0013
Additional numbers attached? Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597 Street Address: 1233 20th Street, N.W. Suite 501 City: Washington State: DC zip: 20036 Phone Number: (202) 955-3750 Fax Number: (202) 955-3751	Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title 8. Payment information a. Credit Card Last 4 Numbers Expiration Date
Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597 Street Address: 1233 20th Street, N.W. Suite 501 City: Washington State: DC zip: 20036 Phone Number: (202) 955-3750 Fax Number: (202) 955-3751 Email Address: rpk@raderfishman.com	Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number 18-0013 Authorized User Name Ronald P. Kananen
Additional numbers attached? Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597 Street Address: 1233 20th Street, N.W. Suite 501 City: Washington State: DC zip: 20036 Phone Number: (202) 955-3750 Fax Number: (202) 955-3751 Email Address: rpk@raderfishman.com	Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number 18-0013
Additional numbers attached? i. Name and address to whom correspondence concerning document should be mailed: Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC Internal Address: Atty. Dkt.: SON-3597 Street Address: 1233 20th Street, N.W. Suite 501 City: Washington State: DC Zip: 20036 Phone Number: (202) 955-3750 Fax Number: (202) 955-3751 Email Address: rpk@raderfishman.com . Signature:	Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number 18-0013 Authorized User Name Ronald P. Kananen

10/24/2006 MJAMA1 00000049 180013 11499730 01 FC:8021 40.00 DA

REEL: 018445 FRAME: 0091

S06P0932US00 Docket Number: <u>S0N-3597</u>

ASSIGNMENT

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 SEMICONDUCTOR INTEGRATED CIRCUIT

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 7-35 Kitashinagawa 6-Chome, Shinagawa-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.

	ecord in this application to insert the serial number and filing date of
this application in the spaces that follow: Serial Number: 1	1/499,/30, Filing Date: Aug. 7, 2006
This assignment executed on the dates indicated below	
Tomofumi ARAKAWA	
Name of first or sole inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of first or sole inventor	
1 l . \ l	S is the second

Signature of first or sole inventor

PATENT REEL: 018445 FRAME: 0092

Date of this assignment

Mutsuhiro OHMORI	
Name of second inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
Residence of second inventor	
mutsuliro Ohmori	September 19, 2006 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 date of U.S. Patent Application
Residence of fourth inventor	
Signature of fourth inventor	Date of this assignment
AL COL	
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: 018445 FRAME: 0093

RECORDED: 10/20/2006