04-10.	-2002
FORM PTO-1595 RF	U.S. DEPARTMENT OF COMMERCE
To the Honorable Commissioner of Patents and Trademark thereof.	attached original documents or copy
1. Name of conveying party(ies):  TAKASHI NOGUCHI 3.28.02	Name and address of receiving party(ies):     Name: Sony Corporation
	Internal Address:
Additional name(s) of conveying party(ies) attached? □ Yes □ No	7-35, Kitashinagawa 6-chome Shinagawa-ku, Tokyo 141, Japan
3. Nature of conveyance:	Street Address:
<ul> <li>☑ Assignment</li> <li>☐ Merger</li> <li>☐ Security Agreement</li> <li>☐ Other</li> </ul>	City:State:Zip:
Execution Date March 5, 2002	Additional Name(s) & Address(es) attached   Yes   No
4. Application (number(s) or patent number(s):  If this document is being filed together with a new application, the execution date of the application is:	
A. Patent Application No.(s)  U.S. Serial No. 10/014,105 filed December 11, 2001  Attorney Docket No. 09792909-5286	
Additional numbers attached? ☐ Yes ☒ No	w S
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved  1
	7. Total Fee (37 CFR 3.41 \$ 40.00 ⊠ Enclosed
SONNENSCHEIN NATH & ROSENTHAL P.O. Box #061080	☑ Authorized to be charged to deposit account any Additional fees
Wacker Drive Station Sears Tower Chicago, IL 60606-1080 Customer ID No. 26263	8. Deposit Account Number:  19.3140  (Attach duplicate copy of this page if paying by deposit account)
DO NOT USE THIS SPACE	
9. Statement and signature:  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.  David R. Metzger  Name of Person Signing  Signature  March 19, 2002  Date  Total number of pages 2	
Mail documents to be recorded and required cover sheet information to:  Commissioner of Patents and Trademarks  Box Assignments  Washington, D.C. 20231+	

04/09/2002 AGHMED: 00000062 100:4105 51 FE:581 40.00 UP

> PATENT REEL: 012759 FRAME: 0026

Docket Number: 09792909-5286

## 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 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 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.

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: 10/014,105, Filing Date: DECEMBER 11, 2001

This assignment executed on the dates indicated below.

TAKASHI NOGUCHI	
Name of first or sole inventor	Execution date of U.S. Patent Application
KANAGAWA, JAPAN	
Residence of first or sole inventor  Takashi Megnchi  Signature of first or sole inventor	March. 5, 2002.  Date of this assignment

RECORDED: 03/28/2002

PATENT REEL: 012759 FRAME: 0027