05-04-1998 FLH Ref. No.: 450100-4143 ILS DEPARTMENT OF COMMERCE APR 2 7 1998 Patent and Trademark Office 100700764 🎉 le Commissioner of Patents and indu _ned original documents or copy thereof. To the Hon 1. Name of conveying 2. Name and address of receiving party(ies) Name: SONY CORPORATION NAOFUMI YANAGIHARA, MARI HORIGUCHI, MAKOTO SATO, ICHIRO 7-35 Kitashinagawa 6-chome Shinagawa-Ku, Tokyo 100-31, Japan HAMADA, TAKEHIKO NAKANO Additional name(s) of conveying party(ies) attached? Additional name(s) & address(es) attached? Yes x No __ Yes X No 3. Nature of conveyance: X Assignment Security Agreement Merger Change of Name Other Execution Date(s): March 19, March 20, March 31, April 8, and April 13, 1998 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: Patent Application No.(s) 08/954,757 filed October 20, 1997 Additional numbers attached? __ Yes _X No Total number of applications and Name and address of party to whom correspondence patents involved _1_ concerning document should be mailed: WILLIAM S. FROMMER Total fee (37 CFR 3.41) \$ 40.00 <u>X</u> Enclosed Internal Address: FROMMER LAWRENCE & HAUG LLP Authorized to be charged to deposit account 50-0320 Street Address: 745 FIFTH AVENUE 8. Deposit account number: NEW YORK State: N.Y. Zip: 10151 (Attach duplicate copy of this page if paying by deposit account) Do not use this space 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. COODONKESSUM April 23, 1998 1802 WILLIAM S. FROMMER Date Signature Name of Person Signing Total number of pages including cover sheet, attachments, and document: 3 Do not detach this portion 05/14/1998 ASELLMAN 00000124 08954757 documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks 05 HC:581 40.00 OP Box Assignments Washington, D.C. 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet.

Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011),

Washington, D.C. 20503.

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

TRANSMITTING APPARATUS AND METHOD, RECEIVING APPARATUS AND METHOD

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 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: 08/954,757, Filing Date: 0ctober 20, 1997.

This assignment executed on the dates indicated below.

NAOFUMI YANAGIHARA	March 19, 1998
Name of first or sole inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of first or sole inventor	March 19, 1998
Signature of first or sole inventor	Date of this assignment
MARI HORIGUCHI	April 8. 1998
Name of second inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
Residence of second inventor Mari Horiguchi	April 8, 1998
Signature of second inventor	Date of this assignment
MAKOTO SATO	April 13, 1998
Name of third inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of third inventor Malcole Salo	April 13, 1998
Signature of third inventor	Date of this assignment

S97P914US00

FLH File No. 450100-4143

ICHIRO HAMADA	March 20, 1998
Name of fourth inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
Residence of fourth inventor Hamaola	March 20, 1998
Signature of fourth inventor	Date of this assignment
TAKEHIKO NAKANO	March 31, 1998
Name of fifth inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
Residence of fifth inventor Jakehiko nakano	March 31, 1998
Signature of fifth inventor	Date of this assignment