08-29-2002 FLH Ref. No.: 450101-03474 U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office 102205463 record the attached original documents or copy thereof. To the Honorable Commissioner of Paragrams 1. Name of conveying party(ies) Name and address of receiving party(ies) Name: SONY CORPORATION Yoshikazu MIYATO Yasunari IKEDA FINANCE SECTION 7-35 Kitashinagawa 6-chome Shinagawa-Ku, Tokyo 141-0001, Japan Additional name(s) of conveying party(ies) attached? Additional name(s) & address(es) attached? Yes x No \_\_ Yes <u>X</u> No 3. Nature of conveyance: 18-26-62 Assignment Security Agreement Merger Change of Name Other Execution Date: April 25 and April 26, 2002 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: USSN 10/129,203 (corresponding to Int'l Patent Application No.(s) PCT/JP01/07799 filed 7 September 2001) Additional numbers attached? \_\_\_ Yes \_X No Total number of applications and WILLIAM S. FROMMER Name: Total fee (37 CFR 3.41) \$ 40.00 Enclosed <u>X</u> Internal Address: FROMMER LAWRENCE & HAUG LLP Authorized to be charged to deposit account 50-0320 Street Address: 745 FIFTH AVENUE Deposit account number: NEW YORK State: N.Y. Zip: 10151 City: (Attach duplicate copy of this page if paying by deposit account) Do not use this space <u>Statement and signature.</u>
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. August 19, 2002 Glenn F. Savit Date Name of Person Signing Total number of pages including cover sheet, attachments, and document: 3 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks 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.

> **PATENT** REEL: 013228 FRAME: 0207

## **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

## OFDM MODULATION/DEMODULATION SYSTEM

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 141-0001 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: International Serial Number: <a href="https://pct/lember.ncm/">PCT/JP01/07799</a>, International Filing Date: 7 September 2001.

This assignment executed on the dates indicated below.

PATENT 1 of 2 REEL: 013228 FRAME: 0208

Yoshikazu MIYATO	
Name of first or sole inventor	Execution date of U.S. Patent Application
Chiba, Japan	
Residence of first or sole inventor	
Yoshikaza Miyato	April 25, 2002
Signature of first or sole inventor	Date of this assignment
Yasunari IKEDA	
Name of second inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
Residence of second inventor	Ann 26 2002

**RECORDED: 08/26/2002** 

Date of this assignment

**PATEN**age 2 of 2 **REEL: 013228 FRAME: 0209**