

03-01-1999

FLH Ref. No.: 450117-4822

MKD 2-16-99



U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

100975028

To the Honorable Commissioner of Patent.

Send original documents or copy thereof.

1. Name of conveying party(ies)

Ralf BÖHNKE, Seiichi IZUMI

Additional name(s) of conveying party(ies) attached?

Yes No

2. Name and address of receiving party(ies)

Name: SONY International (Europe) GmbH
Hugo-Eckener-Strasse 20
D-50829 Köln-Ossendorf
GERMANY

Additional name(s) & address(es) attached? Yes No

3. Nature of conveyance:

- Assignment
- Security Agreement
- Merger
- Change of Name
- Other

Execution Date: November 27, 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: November 27, 1998

A. Patent Application No.(s) _____ filed _____

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: WILLIAM S. FROMMER

Internal Address: FROMMER LAWRENCE & HAUG LLP

Street Address: 745 FIFTH AVENUE

City: NEW YORK State: N.Y. Zip: 10151

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41) \$ 40.00
 Enclosed
 Authorized to be charged to deposit account 50-0320

8. Deposit account number:
(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.

WILLIAM S. FROMMER

Name of Person Signing

William S. Frommer
Signature

February 16, 1999

Date

Total number of pages including cover sheet, attachments, and document: 2

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

02/25/1999 ASELLMAN 00000026 09250905

04 FC:581

40.00 OP

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.

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

Data and pilot mapping in an OFDM 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 INTERNATIONAL (EUROPE) GmbH, a German corporation, with offices at Hugo-Eckener-Strasse 20, D-50829 Köln-Ossendorf, GERMANY (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;

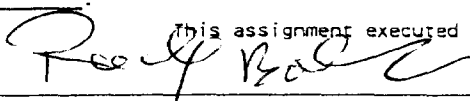
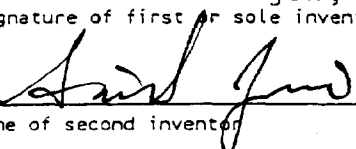
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters patent which may 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: _____, Filing Date: _____

This assignment executed on the dates indicated below.

	
Name of first or sole inventor Ralf Böhnke	Execution date of U.S. Patent Application
Residence of first or sole inventor D-73732 Esslingen, Germany	27. 11. 98
Signature of first or sole inventor 	Date of this assignment
Name of second inventor Seiichi Izumi	Execution date of U.S. Patent Application
Residence of second inventor D-70736 Fellbach, Germany	27. 11. '98
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