

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office 102167650 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies) Name of conveying party(ies) 7-23-02 SONY CORPORATION Ryuji KOHNO, Masayoshi ABE, Noboru SASHO, Shinichiro 7-35 Kitashinagawa 6-chome Shinagawa-Ku, Tokyo 141-0001, Japan HARUYAMA, Robert Henry MORELOS-ZARAGOZA, Francis SWARTS, Pieter VAN ROOYEN, Yukitoshi SANADA, Lachlan Bruce MICHAEL, and Hamid AMIR-ALIKHANI, Veselin BRANKOVIC SONY INTERNATIONAL (EUROPE) GMBH Kemperplatz 1 Additional name(s) of conveying party(ies) attached? \_\_ Yes <u>X</u> No 10785 Berlin, Germany Additional name(s) & address(es) attached? \_\_ Yes \_x No 3. Nature of conveyance: X Assignment Security Agreement Merger Change of Name Other Execution Date: May 24, May 17, May 17, May 21, May 29, May 22, May 22, May 29, June 21 and June 22, 2002 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 10/070,283 (corresponding to Int'l Patent Application No.(s) PCT/JP00/04550 filed 7 July 2000) Additional numbers attached? \_\_\_ Yes \_X No Name and address of party to whom correspondence 6. Total number of applications and patents involved . . . . . . . . . . . . \_1\_ concerning document should be mailed: WILLIAM S. FROMMER Name: 7. 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 8. 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 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. July 18, 2002 Glenn F. Savit Date Name of Person Signing Signature Total number of pages including cover sheet, attachments, and document: 10 Do not detach this portion Mail documents to be recorded with required cover sheet information to: 24/2002 \$TDN11 00000236 10070283 Commissioner of Patents and Trademarks Box Assignments 40.00 0 FC:581 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: 013112 FRAME: 0069

#### 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

#### UNIVERSAL PLATFORM FOR SOFTWARE DEFINED RADIO

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, Japan and SONY INTERNATIONAL (EUROPE) GMBH, a German corporation, with offices at Kemperplatz 1, 10785 Berlin, 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: International Serial Number: <a href="PCT/JP00/04550">PCT/JP00/04550</a>, International Filing Date: <a href="7">7 July 2000</a>.

This assignment executed on the dates indicated below.

Ryuji KOHNO		
Name of first or sole inventor	Execution date of U.S. Patent Application	
Tokyo, Japan		
Residence of first or sole inventor	May 24/200Z	
Signature of first or sole inventor	Date of this assignment	
Masayoshi ABE		
Name of second inventor	Execution date of U.S. Patent Application	
Tokyo, Japan		
Residence of second inventor	May / 17/2002	
Signature of second inventor	Date of this assignment	
Noboru SASHO		
Name of third inventor	Execution date of U.S. Patent Application	
Kanagawa, Japan		
Residence of third inventor  Notron Auch	May /17/2002	
Signature of third inventor	Date of this assignment	

Shinichiro HARUYAMA	
Name of fourth inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
Residence of fourth inventor  Shinkin. His wyoma	May 21, 2002
Signature of fourth inventor	Date of this assignment
Robert Henry MORELOS-ZARAGOZA	
Name of fifth inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of fifth inventory 2	May 29, 2002
Signature of fifth inventor	Date of this assignment
Francis SWARTS	
Name of sixth inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of sixth inventor	
Signature of sixth inventor	Date of this assignment
Pieter VAN ROOYEN	
Name of seventh inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of seventh inventor	
Signature of seventh inventor	Date of this assignment
Yukitoshi SANADA	
Name of eighth inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of eighth inventor Mulaska Samada	May 28, 200)
Signature of eighth inventor	Date of this assignment
Lachlan Bruce MICHAEL	
Name of ninth inventor	Execution date of U.S. Patent Application
Saitama, Japan	
Residence of ninth inventor	29th May 2002
Signature of ninth inventor	Date of this assignment

Hamid AMIR-ALIKHANI	
Name of tenth inventor	Execution date of U.S. Patent Application
Leonberg, Germany	
Residence of tenth inventor	21st June 2002
Signature of tenth inventor	Date of this assignment
Veselin BRANKOVIC	
Name of eleventh inventor	Execution date of U.S. Patent Application
Esslingen, Germany	
Residence of eleverth invertor	22 hd /000 2002
Signature of eleventh inventor	Date of this assignment

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Ryuji KOHNO	
Name of first or sole inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of first or sole inventor	
Signature of first or sole inventor	Date of this assignment
Masayoshi ABE	
Name of second inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of second inventor	
Signature of second inventor	Date of this assignment
Noboru SASHO	
Name of third inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
Residence of third inventor	

Date of this assignment

Signature of third inventor

Shinichiro HARUYAMA	
lame of fourth inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
desidence of fourth inventor	
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Robert Henry MORELOS-ZARAGOZA	
Name of fifth inventor	Execution date of U.S. Patent Application
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Tokyo, Japan	
Residence of eighth inventor	
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Lachlan Bruce MICHAEL	
Name of ninth inventor	Execution date of U.S. Patent Application
Saitama, Japan	
Residence of ninth inventor	
Signature of ninth inventor	Date of this assignment

PATENT Page 2 of 3 REEL: 013112 FRAME: 0074

Hamid AMIR-ALIKHANI	
Name of tenth inventor	Execution date of U.S. Patent Application
Residence of tenth inventor	
Signature of tenth inventor	Date of this assignment
Veselin BRANKOVIC	
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Residence of third inventor		
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Page 1 of 3

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Tokyo, Japan	
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Pieter VAN ROOYEN	·
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Tokyo, Japan	
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Signature of tenth inventor	Date of this assignment	-
Veselin BRANKOVIC		
Name of eleventh inventor	Execution date of U.S. Patent Application	_
Residence of eleventh inventor		-
Signature of eleventh inventor	Date of this assignment	-

PATENTage 3 of 3 REEL: 013112 FRAME: 0078

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**RECORDED: 07/23/2002**