OMB No. 9851-0027 (exp. 03/31/2015) RECORDATION FO	United States Patent and Trademerk
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Kazuyoshi Suzuki (04/17/2008) and Katsuji	2. Name and address of receiving party(les)
Matsuura (04/26/2008)	Name: Sony Corporation
	Internal Address:
Additional name(s) of conveying party(les) attached? Yes X No	Street Address:
3. Nature of conveyance/Execution Date(a):	1-7-1 Konan, Minato-ku
Execution Date(s): in parentheses after inventor name	Tokyo
X Assignment Merger Change of Name	- 108-0075 JAPAN
Sacurity Agreement Joint Research Agreement	
	City:
Government Interest Assignment	State;
Executive Order 9424, Confirmatory License	Country: Zip:
Other	Additional name(s) & address(es)
	- attached?
Additional numbers attached	17 Yes X No
	1? Yes X No 8. Yotal number of applications and patents involved:
. Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ	8. Yotal number of applications and
Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG,	6. Yotal number of applications and patents involved:
. Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP	8. Yotal number of applications and
Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP	6. Yotal number of applications and patents involved:
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. Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed
. Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address: Atty. Dkt.: Street Address: 600 South Avenue West	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed None required (government interest not affecting to the charge of th
Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address: Atty. Dkt.: Street Address: 600 South Avenue West	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed
Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address: Atty. Dkt.: Street Address: 600 South Avenue West City: Westfield State: NJ Zip: 07090	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed None required (government interest not affecting to the charge of th
Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address: Atty. Dkt.: Street Address: 600 South Avenue West City: Westfield State: NJ Zip: 07090 Phone Number: 908-654-5000	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed None required (government interest not affecting to the second information).
i. Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address: Atty. Dkl.: Street Address: 600 South Avenue West City: Westfield State: NJ Zip: 07090 Phone Number: 908-654-7866	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed None required (government interest not affecting to the second
i. Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address: Atty. Dkt.: Street Address: 600 South Avenue West City: Westfield State: NJ Zip: 07090 Phone Number: 908-654-7866 Email Address: ataylor@ldikm.com	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed None required (government interest not affecting to the second information in the second in the second information in the second in the secon
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i. Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address: Atty. Dkt.: Street Address: 600 South Avenue West City: Westfield State: NJ Zip: 07090 Phone Number: 908-654-5000 Fax Number: 908-654-7866 Email Address: ataylor@idikm.com Signature:	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed None required (government interest not affecting to a second
S. Name and address to whom correspondence concerning document should be mailed: Name: Lawrence E. Russ LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address: Atty. Dkl.: Street Address: 600 South Avenue West City: Westfield State: NJ Zip: 07090 Phone Number: 908-654-7866 Email Address: ataylor@ldikm.com	8. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 X Authorized to be charged to deposit account Enclosed None required (government interest not affecting to the second seco

REEL: 028572 FRAME: 0862

Docket Number: SONYJP 3.3-1408 Sony Reference No.: S07P1357US00

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:

COMMUNICATION SYSTEM, TRANSMISSION APPARATUS, RECEIVING APPARATUS,

COMMUNICATION METHOD, AND PROGRAM

for which an International Application was filed on 16 May 2007, PCT/JP2007/060009, designating the United States;

AND WHEREAS, Sony Corporation, a Japanese corporation with offices at 1-7-1 Konan, Minato-ku, Tokyo 108-0075, 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 application nur and filing date of this application in the spaces that follow: Application Number:, Filing Date:		
This assignment executed on the dates indicated below.		
Każuyoshi SUZUKI		
Name of First or Sole Inventor	Execution Date of U.S. Patent Application	
Tokyo, Japan		
Residence of First or Sole Inventor Kazuyoshi Suzuki	April 17, 2008	
Signature of First or Sole Inventor	Date of this Assissant	

Date of this Assignment

PATENT REEL: 028572 FRAME: 0863 LDLKM

Docket Number: SONYJP 3.3-1408 Sony Reference No.: S07P1357US00

Katsuji MATSUURA	
Name of Second Joint Inventor	Execution Date of U.S. Patent Application
Tokyo, Japan	
Residence of Second Joint Inventor	
•	
Signature of Second Joint Inventor	Date of this Assignment

816604_1.DQC

PATENT REEL: 028572 FRAME: 0864

Signature of First or Sole Inventor

Docket Number: SONYJP 3.3-1408

Sony Reference No.: S07P1357US00

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:

COMMUNICATION SYSTEM, TRANSMISSION APPARATUS, RECEIVING APPARATUS.

COMMUNICATION METHOD, AND PROGRAM

for which an International Application was filed on 16 May 2007, PCT/JP2007/060009, designating the United States;

LDLKM

AND WHEREAS, Sony Corporation, a Japanese corporation with offices at 1-7-1 Konan, Minato-ku, Tokyo 108-0075, 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 application num and filing date of this application in the spaces that follow: Application Number:, Filing Date:		
This assignment executed on the dates indicated below.		
Kazuyoshi SUZUKI		
Name of First or Sole Inventor	Execution Date of U.S. Patent Application	
Tokyo, Japan		
Residence of First or Sole Inventor	* *	

PATENT REEL: 028572 FRAME: 0865

Date of this Assignment

LDLKM

Docket Number: SONYJP 3.3-1408 Sony Reference No.: S07P1357US00

Katsuji MATSUURA

Name of Second Joint Inventor

Execution Date of U.S. Patent Application

Tokyo, Japan Residence of Second Joint Inventor

Signature of Second Joint Inventor

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PATENT REEL: 028572 FRAME: 0866

RECORDED: 07/11/2012