Atty Docket No.:

FORM PTO-1595 06-04 296779US8



11-21-2006



U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Director of the United States Patent and Trademark Ot	103338711	aments or copy thereof.
1. Name of conveying party(ies):  Yomei OTANI, Yoshihiro TOYAMA, Kenji YOKOYAMA, Zhongyao SHENG, Hiroshi ORYOJI, Masashige HAGIMORI, Ikuya SANO  Additional name(s) of conveying party(ies) attached? ☐ Yes ■ No	141-0001, Japa	DRATION nagawa, Shinagawa-Ku, Tokyo,
3. Nature of Conveyance:  ■ Assignment □ Merger □ Security Agreement □ Change of Name □ Other		
Execution Date: October 31, 2006	Additional name(s) and ad	Idress(es) attached?   Yes No
<ul> <li>4. Application number(s) or patent number(s):</li> <li>☐ This document is being filed together with a new application</li> <li>A. Patent Application No.(s)</li> <li>11/525,185</li> </ul>	B. Patent No.(s)	
Additional numbers attach	ned? □ Yes ■ No	
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total applications and patents involved: 1	
Customer Number  22850 Tel. (703) 413-3000 Fax. (703) 413-2220	8. Deposit account numb	be charged to deposit account
DO NOT USE T	HIS SPACE	
9. Statement and signature  To the best of my knowledge and belief, the foregoing information copy of the original document.  Bradley D. Lytle Name of Person Signing  Registration Number: 40,073  Joseph Sc Flegistration Total number of pages including	cafetta nature afetta, Jr. No. 26,803	NOV 1 5 2006  Date
Do not detach to  Mail documents to be recorded with required cover sheet information  Director of the United States Pa  Mail Stop Assignment R  Alexandria, Vir	on to: atent and Trademark Offic Recordation Services	e
		MRIS: 3888706+ 11588183

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Docket Number: 296779US8

## 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, COMMUNICATION APPARATUS, COMMUNICATION METHOD, AND PROGRAM

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 6-7-35 Kitashinagawa, Shinagawa-Ku, Tokyo, 141-0001 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 serial number and filing date of this application in the spaces that follow: Serial Number: 11/252, 185
Filing Date: September 22, 2006

This assignment executed on the dates indicated below.

Execution date of U.S. Patent Application	
LADDING CONTROL OF CON	
mer 21 7006	
Octiber 31, 2006	
Date of this assignment	

PATENT REEL: 018609 FRAME: 0471

Yoshihiro TOYAMA	
Name of second inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	•
Residence of second inventor	
yashihiro Toyama	October 31, 2006
Signature of second inventor	Date of this assignment
Kenji YOKOYAMA	
Name of third inventor	Execution date of U.S. Patent Application
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Signature of third inventor	Date of this assignment
Zhongyao SHENG	
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Signature of fourth inventor	Date of this assignment
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Name of sixth inventor	
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Residence of sixth inventor	1 - 1
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W GANO	
Ikuya SANO Name of seventh inventor	Execution date of U.S. Patent Application
Kanagawa, Japan Residence of seventh inventor	
ACBIGGING OF SCHOOL MILES	October 31, 2006
Henra Xanv.	Date of this assignment
Signature of seventh inventor	Date of this see Surger

PATENT REEL: 018609 FRAME: 0472

**RECORDED: 11/15/2006**