10-13-2004



RECORDATION FOR	102857696 DMMERCE mark Office	
OMB No. 0651-0027 (exp. 5/31/2002) PATENTS ONLY		
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof		
1. Name of conveying party(ies): 1. Masahiro Saito (09/22/04 2. Norio Fukasawa (09/22/04) 3. Kiyoshi Toyota (09/22/04) 4. Junichi Suzuki (09/22/04 5. Minoru Kubo (09/28/04)	Name and address of receiving party(ies) Name: Sony Corporation Internal Address:	
6. Souichi Murakami (09/28/04) Additional name(s) of conveying party(ies) Attached? Yes X No	Street Address: 6-7-35 Kitashinagawa Shinagawa-Ku	
3. Nature of Conveyance:	City: Tokyo	
Execution Date: see Box 1, conveying parties	Country: Japan Zip: 141-0001 Additional name(s) & Yes X No address(es) attached:	
A. Patent Application No.(s): 10/849,158 Additional numbers attache		
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:	
Name: Ronald P. Kananen RADER, FISHMAN & GRAUER PLLC	7. Total fee (37 CFR 3.41) \$ 40.00 Enclosed	
Street Address: 1233 20th Street, N.W. Suite 501	Authorized to be charged to deposit account Authorized to be charged to credit card (Form 2038 enclosed)	
City: State: Zip: Washington DC 20036	8. Deposit account number: 18-0013 (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. Ronald P. Kananen, Reg. No. 24,104 Name of Person Signing Signature Date		
Total number of pages including cover sheet, attachments, and documents:		

01 FC:8021

ASSIGNMENT	Docket Number:
WHEREAS, I, as a below named inventor, residing at the a only one name is listed below) or a joint inventor (if plural names are listed be OPTICAL HEAD AND RECORDING AND/OR REPRODUCING APPARATU	below) of certain new and useful improvements in
for which application for Letters Patent of the United States of America was exand address;	xecuted by me on the date indicated next to my name
AND WHEREAS, Sony Corporation, a Japanese corporal Shinagawa-Ku, Tokyo, Japan (hereinafter referenced as ASSIGNEE) is desirous said application disclosing the invention and in, to and under any Letters Pattherefor in the United States and in any and all foreign countries;	of acquiring all interest in, to and under said invention,
NOW THEREFORE, in consideration of the sum of One Dol the receipt and sufficiency of which are hereby acknowledged, I, as a sole or just hereby assign, sell and transfer unto the said ASSIGNEE, its successors, assign interest in the said invention, said application, including any divisions and convented the United States, and countries foreign thereto, which may be granted rights and/or convention rights under the International Convention for the Protect Relating to Patents, Designs and Industrial Models, and any other international adheres, and to any other benefits accruing or to accrue to me with respect to patents in the United States and countries foreign thereto, and I hereby authorized said United States Letters Patent to said ASSIGNEE, as the assignee of the will be accountried to the said accountried t	oint inventor as indicated below, by these presents do ns, and legal representatives, the entire right, title and intinuations thereof, and in and to any and all Letters d for said invention, and in and to any and all priority tion of Industrial Property, Inter-American Convention al agreements to which the United States of America of the filing of applications for patents or securing of a and request the Commissioner of Patents to issue the
And I further agree to execute all necessary or desirable and lawful ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal and without further remuneration, in order to perfect title in said invention, applications and Letters Patent of the United States and countries foreign there	representatives may from time-to-time present to me modifications, and improvements in said invention,
And I further agree to properly execute and deliver and without further papers for application for foreign patents, for filing subdivisions of said applications of any Letters Patent which may be granted for my aforesaid invention, prepare at its own expense;	cation for patent, and or, for obtaining any reissue or
And I further agree that ASSIGNEE will, upon its request, be provided relating to said application, said invention and said Letters Patent and legal educes accessible to me and will testify as to the same in any interference or litigation	quivalents in foreign countries as may be known and
And I hereby covenant that no assignment, sale, agreement or encumbe would conflict with this assignment and sale.	rance has been or will be made or entered into which
And I hereby authorize and request my attorney(s) of record in this application in the spaces that follow: Serial Number: 10/849,158	plication to insert the serial number and filing date of, Filing Date: MAY 20, 2004
This assignment executed on the dates indicated below.	
MASAHIRO SAITO	
Name of first or sole inventor	Execution date of U.S. Patent Application
Kanagawa, Japan	
Residence of first or sole inventor	0
masahiro faito	September 22, 200 × Date of this assignment
Signature of first or sole inventor	Date of this assignment

PATENT REEL: 015866 FRAME: 0718

NORIO FUKASAWA	
Name of second inventor	Execution date of U.S. Patent Application
KANAGAWA, JAPAN	
Residence of second inventor	
Norio Fukasawa	September 22, 2004
Signature of second inventor	Date of this assignment
KIYOSHI TOYOTA	
Name of third inventor	Execution date of U.S. Patent Application
TOKYO, JAPAN	
Residence of third inventor	
Kryoshi Pojota	September 22, 2004
Signature of third inventor	Date of this assignment
JUNICHI SUZUKI	
Name of fourth inventor	Execution date of U.S. Patent Application
KANAGAWA, JAPAN	
Residence of fourth inventor	
hinichs Terriber	Sentember 12. 710X
Signature of fourth inventor	5.eptember 32.200X Date of this assignment
MINORU KUBO	
Name of fifth inventor	Execution date of U.S. Patent Application
KANAGAWA, JAPAN	
Residence of fifth inventor	
ninou Kubo	September 28, 2004 Date of this assignment
Signature of fifth inventor	/ Date of this assignment

PATENT REEL: 015866 FRAME: 0719

SOUICHI MURAKAMI	
Name of second inventor	Execution date of U.S. Patent Application
CHIBA, JAPAN	
Residence of second inventor	
Southo Burakaun	September 28. 2004 Date of this assignment
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
Name of fourth inventor	Execution date of U.S. Patent Application
Residence of fourth inventor	
Signature of fourth inventor	Date of this assignment
Name of fifth inventor	Execution date of U.S. Patent Application
Residence of fifth inventor	
Signature of fifth inventor	Date of this assignment

PATENT REEL: 015866 FRAME: 0720

RECORDED: 10/07/2004