05-25-2000

U.S. DEPARTMENT OF COMMERCE

SOA-286 10133	
To the Honorable Commissioner of Patents and Trademarks: Please r	
Name of conveying party(ies)	2. Name and address of receiving party(ies)
Peter Rae SHINTANI and Kenichiro TOYOSHIMA	Name: SONY ELECTRONICS, INC.
Additional name(s) of conveying party(ies) attached No	Internal Address:
3. Nature of conveyance:	Street Address: 1 SONY DRIVE
⊠ Assignment □ Merger	City: Park Ridge State: NJ Zip: 07656-8003
☐ Security Agreement ☐ Change of Name Other	Additional name(s) & address(cs) attached \(\bigcup_{Y} \) \(\bi
Execution Date: OCTOBER 7, 1999	
4. Application number(s) or patent number(s):	
If the document is being filed together with a new application, the earliest Additional number of Additional numbe	execution date of the application is OCTOBER 7, 1999 abers attached No
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
Name: Ronald P. Kananen, Esq.	7. Total fee (37 CFR 3.41) \$ 40.00
Internal Address: RADER, FISHMAN & GRAUER	☐ Enclosed
Suite 501	Authorized to be charged to Deposit Account
Street Address: 1233 20th Street, NW	8. Deposit account number: 18-0013
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	is true and correct and any attached copy is a true copy of the original
document. Ronald P. Kananen Name of Person Signing Name of Person Signing	October 22, 1999 Date Total number of pages comprising cover sheet 2

NOTE: 2 ASSIGNEES

11/02/1999 DNGUYEN 00000056 180013 09422970 01 FC:581 40.00 CH

> PATENT REEL: 010657 FRAME: 0040

FORM PTO-1984

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U.S. DEPARTMENT OF COMMERCE

SOA-286	Patent and Trademark Office
To the Honorable Commissioner of Patents and Trademarks: Please	record the attached original documents or copy thereof.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Peter Rae SHINTANI and Kenichiro TOYOSHIMA	Name: SONY CORPORATION
Additional name(s) of conveying party(ies) attached No	Internal Address:
3. Nature of conveyance: ☐ Assignment ☐ Merger ☐ MAR 1 4 2000 ☐ Security Agreement ☐ Change of National TRADE MAR	Street Address: 7-35 KITASHINAGAWA 6-CHOME SHINAGAWA-KU City: TOKYO, JAPAN Additional name(s) & address(es) attached
Other	
Execution Date: OCTOBER 7, 1999	
4. Application number(s) or patent number(s):	
If the document is being filed together with a new application, the	execution date of the application is OCTOBER 7, 1999
Additional numbers attached No	
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
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City: Washington, D.C. Zip: 20036	(Attach duplicate copy of this page if paying by deposit account)
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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	October 22, 1999 Date
Name of Person Signing Signatur	Total number of pages comprising cover sheet 2

NOTE: 2 ASSIGNEES

DC025822.DOC

Docket Number: SOA-286

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

METHOD AND APPARATUS FOR DECREASING THE TIME REQUIRED TO GENERATE A CHANNEL MAP IN A TELEVISION SIGNAL RECEIVER

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, Japan and Sony Electronics, Inc., a Delaware corporation with offices at 1 Sony Drive, Park Ridge, New Jersey 07656-8003, (hereinafter referenced as ASSIGNEES) 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 ASSIGNEES, 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 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 ASSIGNEES, 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 ASSIGNEES or its designee, as ASSIGNEES 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

PATENT REEL: 010657 FRAME: 0042 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 ASSIGNEES 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.

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.
Peter Rae SHINTANI
Name of first inventor Execution date of U.S. Patent Application
15616 Bernardo Center Drive Apt #3501, San Diego, CA 92127
1 99
Residence of first inventor Date of this assignment
Signature of first inventor Date of this assignment
TOYOGUTMA
Kenichiro TOYOSHIMA Name of second inventor Execution date of U.S. Patent Application
Name of Second Inventor
18622 Caminito Cantilena Apt #317, San Diego, CA 92128
Residence of second inventor
12t 7 1999
Residence of second inventor Constant
Signature of second inventor
Name of third inventor Execution date of U.S. Patent Application
Name of Gills and All States and All
- in a third inventor
Residence of third inventor
Signature of third inventor Date of this assignment

PATENT RECORDED: 10/22/1999 REEL: 010657 FRAME: 0043