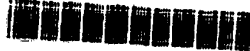


07-08-1998

FORM PTO-1585  
1/31/82



100756456

HEET U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

U.S. PTO  
100756456  
06/17/98

To the Honorable Commissioner of Patents and Trademarks: Please Record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
Tooru Ueda  
  
Additional name(s) of conveying party(ies) attached?  
 Yes  No

2. Name and address of receiving party(ies):  
Name: Sony Corporation  
Internal Address: \_\_\_\_\_  
\_\_\_\_\_

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_  
Execution Date May 19, 1998

Street Address: 7-35, Kitashinagawa 6-Chome  
Shinagawa-Ku  
City: Tokyo State: Japan Zip: \_\_\_\_\_  
Additional Name(s) & Address(es) attached  Yes  No

4. 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: 5-19-98  
A. Patent Application No.(s) B: Patent No.(s)  
Attorney Docket No. P98,0860  
  
Additional numbers attached?  Yes  No

5. Name and address of party to whom  
correspondence concerning document should be  
mailed:  
  
Hill & Simpson, P.C.  
  
85th Floor Sears Tower  
233 S. Wacker Drive  
Chicago, IL 60606

6. Total number of applications and patents involved  
1  
  
7. Total Fee (37 CFR 3.41) . . . . . \$ 40.00  
 Enclosed  
 Authorized to be charged to deposit account any  
Additional fees  
  
8. Deposit Account Number:  
08-2280  
(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.*

Lewis T. Steadman   
Name of Person Signing Signature

June 16, 1998  
Date

Total number of pages: 2

Mail documents to be recorded and required cover sheet information to:  
Commissioner of Patents and Trademarks  
Box Assignments  
Washington, D.C. 20231

PATENT  
REEL: 9290 FRAME: 0629

U.S. PTO  
100756456  
06/17/98

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 A MEMORY SYSTEM HAVING MULTIPLE READING AND WRITING PORTS

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 (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: \_\_\_\_\_, Filing Date: \_\_\_\_\_

This assignment executed on the dates indicated below.

<u>TOORU UEDA</u>	<u>May 19, 1998</u>
Name of first or sole inventor	Execution date of U.S. Patent Application
<u>KANAGAWA, JAPAN</u>	
Residence of first or sole inventor	
<u>Tooru Ueda</u>	<u>May 19, 1998</u>
Signature of first or sole inventor	Date of this assignment