Mail documents to be recorded with required cover sheet information to: Mail Stop Assignment Recordation Services Commissioner for Patents 40.00 OP P.O. Box 1450 Alexandria, VA 22313-1450

Do not detach this portion

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

Internal Address: FROMMER LAWRENCE & HAUG LLP

Statement and signature.

of the original document.

12/30/2003 ECDOPER 00000092 10738793

William S. Frommer

Name of Person Signing

Street Address:

City:

01 FC:8021

745 FIFTH AVENUE

NEW YORK State: N.Y. Zip: 10151

Authorized to be charged to deposit account 50-0320

> December 16, 2003 Date

Total number of pages including cover sheet, attachments, and document: 3

(Attach duplicate copy of this page if paying by deposit

8. Deposit account number:

account)

Do not use this space

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy

## CMS Docket Number:

ASSIGNMENT

WHEREAS, I, as below named inventors, residing at the addresses stated next to our names, 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

DATA-PROCESSING APPARATUS, DATA-PROCESSING 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 7-35 Kitashinagawa 6-Chome, Shinagawa-Ku, Tokyo, Japan (hereinafter referred to 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. Shiro HAGIHARA Execution date of U.S. Patent Application Name of first or sole inventor Kanagawa, Japan Residence of first or sole inventor December 3, 2003 shiro Idagihara Signature of first or sole inventor Hisao TANAKA Name of second inventor Execution date of U.S. Patent Application Tokyo, Japan Residence of second inventor Dec & 2003 Dec. 8.2003 + Dao Tanaka Signature of second inventor Hideki ANDO Name of third inventor Execution date of U.S. Patent Application Kanagawa, Japan Residence of third inventor Signature of third inventor

ADDITIONAL INVENTOR(S) ON NEXT PAGE

PATENT REEL: 014826 FRAME: 0908

Masaki HIROSE	
Name of fourth inventor Kanagawa, Japan	Execution date of U.S. Patent Application
Residence of fourth inventor	
masahi Hirose	December 8, 2003
Signature of fourth inventor	Date of this assignment
Satoshi KATSUO	·
Name of fifth inventor Kanagawa, Japan	Execution date of U.S. Patent Application
Residence of fifth inventor	
Satoshi Katsuo	Dec 8.2003
Signature of fifth inventor	Dec. 2, 2003  Date of this assignment
Takashi FURUKAWA	
Name of sixth inventor Kanagawa, Japan	Execution date of U.S. Patent Application
Residence of sixth inventor	
Takashi Furukawa	Dec. 8, 2003
Signature of sixth inventor	Date of this assignment
Ţakayoshi KAWAMURA	
Name of seventh inventor Kanagawa, Japan	Execution date of U.S. Patent Application
Residence of seventh inventor - Sakayoshi Kawamwa	Dec. 8, 2003
Signature of seventh inventor	Date of this assignment
Motohiro TERAO	
Name of eighth inventor Kanagawa, Japan	Execution date of U.S. Patent Application
Residence of eighth inventor	
Motohiro Terao	Dec 8, 2003
Signature of eighth inventor	Date of this assignment
Name of ninth inventor	Execution date of U.S. Patent Application
Residence of ninth inventor	
Signature of ninth inventor	Date of this assignment

**PATENT REEL: 014826 FRAME: 0909**