FLH Ref. No.: 450100-03454

	U.S. DEPARTMENT OF COMMERCE
101846	502 Patent and Trademark Office
	ease record the attached original documents or copy thereof.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Tsuneo HAYASHI	Name: SONY CORPORATION 7-35 Kitashinagawa 6-chome Shinagawa-Ku, Tokyo 141-0001, Japan
Additional name(s) of conveying party(ies) attached? Yes X No MRD	Additional name(s) & address(es) attached? Yes _x No
3. Nature of conveyance: 9.7.0/	or a company
_X Assignment Security Agreement Merger Change of Name Other	09/94840 09/94840
Execution Date: August 10, 2001	1. T.
If this document is being filed together with the application is: August 10, 2001 A. Patent Application No.(s) filed O9948400	th a new application, the execution date of Eached?Yes _X _ No 6. Total number of applications and patents involved 1 7. Total fee (37 CFR 3.41) \$ 40.00
City: NEW YORK State. N.T. Cips	account)
Do not us	e this space
william S. Frommer	September 10, 2001 Date Total number of pages including cover sheet, attachments, and document: 2
7/2001 TDIAZ1 00000135 09948400 Do not deta	ach this portion
FC:581 Ma ⁴ Cocuments to be recorded wit	h required cover sheet information to: Patents and Trademarks
Box A Washingt	on, D.C. 20231
Public burden reporting for this sample cover sheet is estimated by the decument and gathering the	ated to average about 30 minutes per document to be recorded, data needed, and completing and reviewing the sample cover sheet.

Public burden reporting for this sample cover sheet is estimated to average about 35 minutes and reviewing the sample cover sheet 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, 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.

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

DISC DRIVE APPARATUS

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 a date of this application in the spaces that follow: Serial Number 1	ttorney(s) of record in this application to insert the serial number and filing mber:
This assignment executed on the dates in	
TSUNEO HAYASHI	
Name of first or sole inventor CHIBA, JAPAN	Execution date of U.S. Patent Application
Residence of first or sole inventor Signature of first or sole inventor	Date of this assignment
Name of second inventor	Execution date of U.S. Patent Application
Residence of second inventor	
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

RECORDED: 09/07/2001

PATENT REEL: 012157 FRAME: 0989