FORM PTO-1595 (Rev. 6-93)

03-15-2001



ER SHEET

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

101636191	Attorney Docket No.: 041514-5097		
To the Commissioner for Patents: Please record the attached original documents or copy thereof.	ATTN: BOX ASSIGNMENT		
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):		
Kanji ISHIHARA	Name: PIONEER CORPORATION		
Additional name(s) of conveying party(ies) attached? YesX_ No	Internal Address:		
3. Nature of conveyance: X Assignment Merger Security Agreement Change of Name	Street Address: No. 4-1 Meguro 1-chome, Meguro-ku, Tokyo-to, Japan		
Other	City: State: Zip:		
Execution Date: February 21, 2001	Additional name(s) & address(es) attached? YesX_ 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: February 21, 2000 A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached:Yes X_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: John G. Smith Internal Address: Morgan, Lewis & Bockius LLP Customer No. 009629	7. Total fee (37 C.F.R §3.41):\$40.00_ _X_ Enclosed Authorized to be charged to deposit account 50-0310		
Street Address: 1800 M Street, N.W. City: Washington State: D.C. Zip: 20036	Deposit account number: 50-0310 Attach duplicate of page if paying by deposit account		
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. John G. Smith Name of Person Signing Signature Signature Date			
Total number of pages including cover sheet, attachments and documents: 2			

1-WA/1568122.1

PATENT REEL: 011578 FRAME: 0103

ATTORNEY DOCKET NO.: SOLE/JOINT INVENTION (U.S. Rights Only)

ASSIGNMENT

WHEREAS I/We, the below named inven APPARATUS FOR AND METHOD OF DETERI	ntor(s), [hereinafter referred to as Assignor(s)], MINING INFORMATION RECORD MEDIUM		
for which I/WE executed an application for United States Letters Patent on, (Serial N	States Letters Patent concurrently herewith;		
WHEREAS, PIONEER CORPORATION address is No. 4-1 Meguro 1-chome, Meguro-ku, the entire right, title, and interest in and to this invalenters Patent to be issue upon this application;	n a corporation of Japan Tokyo-to, Japan (hereinafter referred to as vention, the application for United States Letter	Assignee), is desirous of securing	
NOW THEREFORE, be it known that, for acknowledged, I/WE, as assignor(s), have sold, assigner unto the assignee, its lawful successors and as application, and all divisions, and continuations the and all reissues thereof; and I/WE hereby authorize to issue all Letters Patent for this invention to assignment;	ssigns, MY/OUR entire right, title, and interest ereof, and all Letters Patent of the United States and request the Commissioner of Patents and	y sell, assign, transfer, and set in and to this invention and this tes which may be granted thereon, d Trademarks of the United States	
AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.			
IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).			
Full Name of Sole or First Assignor Kanji ISHIHARA	Assignor's Signature Kanji Ishihata	Date February 21, 2001	
Address c/o Pioneer Corporation, To No. 2610 Hanazono 4-chome, Toko	okorozawa Works.	Citizenship Japanese	
Full Name of Second Assignor	Assignor's Signature	Date	
Address		Citizenship	
Names of additional inventors attached [] Yes [X] No			

MORGAN, LEWIS & BOCKIUS

WA01/194585.1

RECORDED: 02/28/2001

PATENT REEL: 011578 FRAME: 0104