FORM PTO-1595 (Rev. 6-93)    D   Z 7   D	RF	11-24-2		ŒET	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		
		101527			Attorney Docket No.: 041514-5086		
To the Assistant Commissioner for I Please record the attached original d		opy thereof.			ATTN: BOX ASSIGNMENT		
1. Name of conveying party(ies):		100	2. Name a	nd address	of receiving party(ies):		
a) Masahiro KATO b) Masayoshi YOSHIDA	Q L A STATE OF THE	Name:		PIONEER CORPORATION			
	hode Alter & Present	Internal	Internal Address:				
Additional name(s) of conveying p	party(les) attac	ned?					
3. Nature of conveyance:			Street A	Address:	4-1, Meguro 1-chome Meguro-ku, Tokyo, JAPAN		
X Assignment Merger Security Agreement Change of Name Other			City: State:		Zip:		
Execution Date(s):a) 08/29/00	0; b) 08/29/00	)	Additiona Yes	al name(s) _X_ N	& address(es) attached?  Io		
4. Application number(s) or patent	number(s):						
If this document is being filed tog	gether with a n	ew application the e	xecution date of	the applic	ation is:		
A. Patent Application No.(s) 0	9/610,690	B. Pa	tent No.(s)		GTEFFERA 00000015 09610690 40.00 UP		
Additional numbers attached: Yes X No  Name and address of party to whom correspondence concerning document should be mailed:				6. Total number of applications and patents involved \(\)			
Name: Mr. Robert J. Gaybrick				7. Total fee (37 C.F.R §3.41): <u>\$40.00</u> X Enclosed			
Internal Address: Morgan, Lewis & Bockius LLP				Authorized to be charged to deposit account 50-0310			
Street Address: Intellectual Property Support Unit 1800 M Street, N.W.				8. Deposit account number: 50-0310 Attach duplicate of page if paying by deposit account			
City: Washington State: D.	.C. <b>Z</b> ip: 2	20036					
9. Statement and Signature							
To the best of my knowled the original document.	_				nd any attached copy is a true copy of		
John G. Smith  Name of Person Signin	g for To	liam O. Trougder	<i>D (<b>Reg.No.38</b>,6</i> gnature	37) _	October 27, 2000 Date		

PATENT REEL: 011258 FRAME: 0584

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

## ASSIGNMENT

In consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration paid to each of the undersigned, the undersigned agree to assign, and hereby do assign, transfer, and set over to:

Pioneer Corporation

having the address:

4-1, Meguro 1-chome, Meguro-ku, Tokyo, Japan

(hereinafter designated as the "ASSIGNEE") the entire right, title, and interest for the United States and all foreign countries (including protection in foreign countries via the Patent Cooperation Treaty), in the invention, and all applications for patent and any Letters Patent which may be granted therefor, the application being known by the Title:

PRE-PIT DETECTOR OF OPTICAL RECORDING MEDIUM

for which application for Letters Patent of the United States was executed on even date herewith unless otherwise indicated below:

filed on	July 7,	2000	
serial No	09/610	,690	

- 1. The undersigned agree to execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the ASSIGNEE may deem necessary or expedient.
- 2. The undersigned agree to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the ASSIGNEE in every way possible in obtaining evidence and going forward with such interference.
- 3. The undersigned agree to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial property or similar agreements.
- 4. The undersigned agree to perform all affirmative acts which may be necessary to obtain a grant of a valid United states patent to the ASSIGNEE.

Page 1 of 2

5. The undersigned hereby authorize and request the commissioner of Patents in the Unite States and the appropriate national or regional authority in each foreign country to issue any and all Letters Patents resulting from said application or any division or divisions or continuing applications thereof to the said ASSIGNEE, as ASSIGNEE of the entire interest, and hereby covenants that they have full right to convey the entire interest herein assigned, and that they have not executed and will not execute, any agreement in conflict herewith.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned names.

The undersigned hereby authorize the firm of

MORGAN LEWIS & BOCKIUS LLP at the address of 1800 M Street, N.W., Washington, D.C. 20036-5869, U.S.A.

to insert hereon any further identification necessary or desirable for recordation of this document.

Aug. 29, 2000 Masahiro Kato

Typed Name: Masahiro KATO

Aug. 29, 2000 Masayoshi Yoshida

Typed Name: Masayoshi YOSHIDA