FORM PTO-1595 1-31-92 1-31-92		U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 05721.0027 Attorney Customer Number: 22,852		
To the Honorable Commissioner of Pater Please record the attached original documents of Conveying party(ice):	8	ATTN. BO	OX ASSIGNMENT	TS .
<ol> <li>Name of conveying party(ies):</li> <li>Naoharu YANAGAWA</li> <li>Masahiro KATO</li> <li>Tatsuhiro YONE</li> <li>Yuko MURAMATSU</li> <li>Shinji SUZUKI</li> </ol>	2. Name:		nddress of receiving	a_
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	Internal	Address:		<del>oje 1</del>
3. Nature of conveyance:	Street A		4-1, Meguro 1-cho Meguro-ku, Tokyo	
Assignment	City:		wegaro-ka, rokyo	, oct 714
Security Change of Name Agreement	State:		Zip Code:	
Other:  Execution Date: 1. and 2. March 7, 2002; 35. March 11, 2002	_ Addition	al name(s) &	Address(es) attac	ched?
the application: March 7, 2002 and March 11, 2002  A. Patent Application Number(s):	B.	Patent Num	ber(s):	09647
			141	09647
Additional numbers attached?	☐ Yes	1 🗵	•	09647
Additional numbers attached?  5. Name and address of party to whom correspondence concerning document should be mailed:	Yes		•	
Name and address of party to whom correspondence	T	Total numbe involved:	No	and registrations
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Mr. Ernest F. Chapman  /2003 VIRUNGI (0900) 18 10103647	6.	Total number involved: 1 Total fee (3)	or of applications at 7 CFR 3.41): \$40 ed (Please charge	and registrations
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Mr. Ernest F. Chapman  /2003 VTRUONG1 (00000118 10103647  40.00 80	6. 7.	Total number involved:  1  Total fee (3)  Enclose account	or of applications a  7 CFR 3.41): \$40  ed (Please charge at)	and registrations
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Mr. Ernest F. Chapman /2003 VTRUONGL 00000VL8 10103547  1581 40.00 8P  Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.	6. 7. ⊠	Total number involved:  1  Total fee (3)  Enclose account	or of applications a  7 CFR 3.41): \$40  ed (Please charge at)	and registrations deficiency to depo
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Mr. Ernest F. Chapman /2003 #TRUENGL @000018 10103547  #581 #0.00 @0  Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.  Street Address: 1300 I Street, N.W.	6. 7. ⊠	Total number involved:  1  Total fee (3)  Enclose account	or of applications a  7 CFR 3.41): \$40  ed (Please charge at)	and registrations deficiency to depo
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5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Mr. Ernest F. Chapman /2003 VERUDUGI (0000018 10103647  1581 40.00 3P  Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.  Street Address: 1300 I Street, N.W.  City: Washington, D.C.	6. 7. ⊠	Total number involved:  1  Total fee (3)  Enclose account	er of applications a 7 CFR 3.41): \$40 ed (Please charge of the charge of	and registrations deficiency to depo
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Mr. Ernest F. Chapman /2003 VTRUONG1 00000/18 19137647  40.00 3P  Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.  Street Address: 1300 I Street, N.W.  City: Washington, D.C.  State: Zip: 20005-3315	6. 7. Sand corre	Total number involved:  1  Total fee (3)  Enclose account  Author	er of applications at 7 CFR 3.41): \$40 ed (Please charge of the charge o	and registrations  deficiency to depo  d to deposit accoun

PATENT REEL: 012756 FRAME: 0043

## 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:

## OPTICAL DEVICE AND OPTICALLY RECORDED INFORMATION RECORDING/READING APPARATUS

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

filed	on,	
serial	No	

- 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.
- 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.
- The undersigned agree to execute all papers and 3. 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.

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PATENT REEL: 012756 FRAME: 0044 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

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P. at the address of 1300 I Street, N.W., Washington, D.C. 20005-3315, U.S.A.

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

March 7. 2002 Date	Moroham Janagawa Typed Name: Naoharu YANAGAWA
Date	Typed Name: Naoharu YANAGAWA
March 7, 2002	Masahiro Kato
Date	Typed Name: Masahiro KATO
March 11, 2002	Tatsuhiro Yone
Date	Typed Name: Tatsuhiro YONE
March 11 2001	Yuko Muramatsy
Date	Typed Name: Yuko MURAMATSU
March 11. 2002 Date	Shinji Suzuki
Date	Typed Name: Shinji SUZUKI

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RECORDED: 04/01/2002