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3. Nature of Conveyance:	City State Zip	
<u>x</u> Assignment <u></u> Merger Security Agreement Change of Name Other	Additional name(s) & address(es) attached?	
Execution Date: October 18, 1999		
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:		
A. Patent Application No.(s) 09/399,747	B. Patent No(s).	
Additional numb	bers attached?YesX No	
<ol> <li>Name and address of party to whom correspondence concerning document should be mailed:</li> </ol>	ce 6. Total number of applications and patents involved: One (1)	
SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Suite 800 Washington, D.C. 20037-3202	7. Total Fee (37 CFR 3.41): \$40.00 X Enclosed. Please charge any underpayment in connection with this Assignment to Deposit Account No. 19- 4880.	
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9. Statement and Signature.         To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is copy of the original document.         Ult 2 Ultimeter         Name Darfyl Mexic Reg. No. 23,063    November 10, 1999 Date		
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For Non-U.S. Clients

## Assignment

Whereas I/We, Kenji MACHIDA, Naoto HAYASHI, Yoshiro YONEDA and XX Junji NUMAZAWA all of Tokyo, Japan Makiko KOHRO, Takahisa TANABE and Shinichi NAGAHARA all of Saitama, Japan

hereinafter called assignor(s), have invented certain improvements in

## MAGNETIC REPRODUCING HEAD

and executed an application for Letters Patent of the United States of America therefor on October 18, 1999; and NIPPON HOSO KYOKAI of 2-1, Jinnan 2-chome, Shibuya-ku, Tokyo 150-8001, JAPAN Whereas, PIONEER CORPORATION of No. 4-1, Meguro 1-chome, Meguro-ku, Tokyo, JAPAN

(assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

EWe, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and Ewe reduest the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and Ewe will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee.

I/We hereby authorize and request my attorneys SUGHRUE, MION, ZINN, MACPEAK & SEAS of 2100 Pennsylvania Avenue, N.W., Washington, D.C. 20037-3202 to insert here in parentheses (Application number 09/399,747 \_\_\_\_\_\_\_, filed September 20,1999) the filing date and application number of said application when known.

Date:	October 18, s/ 1999	Lenzi machuda
	1999 October 18, s/ 1999	Xaoto Hayashi
Date	October 18, s/ 1999	yoshiro yoneda
Date:	October 18, <sub>s/</sub> 1999	Junji Tumazawa
Date:	October 18, s/ 1999	makiko hohro
Dat∈:	October 18, 1999 <sup>s/</sup>	Takahisa Tavale
Date:	October 18,s/ 1999	Silimitic hagatura
Dat∈:	s/	
Dat∈	s/	
Dat∈	s/	

(Legalization not required for recording but is prima facile evidence of execution under 35 U.S.C. §261)

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## **RECORDED: 11/10/1999**

## PATENT REEL: 010378 FRAME: 0440