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1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Kazuo YABE	% ⊖ 3
Hideshi ISHIYAMA	Name: Pioneer Corporation
Takahiro USHIBA	Internal Address:
	Street Address: No. 4-1 Meguro 1-chome, Meguro-ku
Additional name/s of conveying party/ies attached?	
3. Nature of conveyance:	City: Tokyo-to
Assignment Merger	State/Country: Japan
☐ Security Assignment ☐ Change of Name	Zip:
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Execution Date: December 18, 2001	Additional name/s & address/es attached? Yes No
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution	n date of the application is: December 19, 2001
it this document is some med together with a new approaches, the executive	December 19, 2001
A. Patent Application No(s).	B. Patent No(s).
(1) unknown	(1)
(2)	(2)
(3)	(3)
Additional numbers attached Yes No	
5. Name and address of party to whom correspondence	6. Total number of applications & patents involved:1
concerning document should be mailed:	7. Total fee (37 CFR 3.41) \$ 40.00
Name: Arthur R. Crawford	7. Total fee (37 CFR 3.41) \$ 40.00 Enclosed
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Street Address: Nixon & Vanderhye P.C.	deficiency in the fee(s) filed, or asserted to be filed, or which
1100 North Glebe Road	should have been filed herewith (or with any paper thereafter
8 th Floor	filed in this application by this firm) to our Account No.
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9. Statements 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	
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Arthur R. Crawford	December 19, 2001
Name of Person Signing Sig	nature Date
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Total number of pages including original cover sheet, attachments, and document: [3]	

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PATENT

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ASSIGNMENT OF PATENT APPLICATION

(Inventors)

Kazuo YABE, Hideshi ISHIYAMA and Takahiro USHIBA

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign,

and hereby does assign, transfer and set over to

(Assignee) (Address)

PIONEER CORPORATION

(of No. 4-1 Meguro 1-chome, Meguro-ku, Tokyo-to, Japan (hereinafter designated as the Assignee) the undersigned's entire right, title and interest for the United States, its territories, dependencies and possessions, and for

the country of

(Other Countries) (Title)

(in the invention, and all application for patent and any Letters Patent which may be

granted therefore, known as

RECORDED: 12/19/2001

for which the undersigned has (have) executed on even date herewith an application for patent in the United States of America or, if not on even date, then has executed or has already filed in (on

, filed on (U.S. appln. Serial No.

The undersigned acknowledges an obligation of assignment of this invention to said assignee at the time the invention was made.

The undersigned agree(s) to execute all papers and documents necessary in connection with the application or any interference which may be declared 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 and further to 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.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patent of the United States 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 he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of NIXON & VANDERHYE P.C. the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhije P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention.

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