FORM PTO-1595 (Rev. 6-93)

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office 102098860 **OVER SHEET** PATENTS ONLY Attorney Docket No.: 041465-5152 To the Commissioner for Patents Please record the attached original documents or copy thereof. ATTN: BOX ASSIGNMENT Name and address of receiving party(ies): 1. Name of conveying party(ies): 5-15-02 Name: PIONEER CORPORATION Toru OHASHI Internal Address: Additional names of conveying party(ies) attached? [X] No [] Yes Street Address: No. 4-1 Meguro 1-chome, Meguro-ku, Tokyo-to, Japan City: 3. Nature of conveyance: State: Zip: [X] Assignment [] Merger Security Agreement [] Change of Name Additional name(s) & address(es) attached? [] Other____ []Yes [X] No Execution Date: April 17, 2002 New Application number(s) or patent number(s): NEW APPLICATION 10,144869 If this document is being filed together with a new application the execution date of the application is: April 17, 2002 B. Patent No.(s) A. Patent Application No.(s) Additional numbers attached: [] Yes [X] No Total number of applications and patents involved: 1 Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 C.F.R. §3.41): <u>\$40.00</u> [] Enclosed [\ddot{X}] Authorized to be charged to Deposit Account 50-0310 John G. Smith Name: Internal Address: Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (Attach duplicate page if paying by deposit account) Customer No. 09629 1111 Pennsylvania Avenue, N.W. Street Address: **Zip:** 20004 City: Washington State: D.C. 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. May 15, 2002

John G. Smith Reg. No. 33,818

Name of Person Signing

Date

Total number of pages including cover sheet, attachments and documents: 2

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> **PATENT** REEL: 012907 FRAME: 0301

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

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:		
DIGITAL FILTER		
for which I/WE executed an application for United States Letters Patent concurrently herewith; or filed an application for United States Letters Patent on		
WHEREAS, PIONEER CORPORATION, a corporation of Japan, whose post office address is No. 4-1 Meguro 1-chome, Meguro-ku, Tokyo-to, Japan (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issue upon this application;		
NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;		
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.		
AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No, filed) the filing dat and application number of said application when known. May 15, 2002		
IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).		
Full Name of Sole or First Assignor Toru OHASHI	Assignor's Signature Toru Chesta	Date 4PR. 17. 100+
Address c/o Pioneer Corporation, Kawagoe Works. No. 25-1 Aza-Nishicho, Yamada, Kawagoe-shi, Saitama-ken, Japan		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: 05/15/2002

PATENT REEL: 012907 FRAME: 0302