## U.S. PATENT AND TRADEMARK OFFICE

RECORDATION FORM COVER SHEET  PATENTS ONLY  To the horomatic Commissioner' of Pearlin and Trademarks: Please second the alluched original securence or copy barset.  Name of conveying party(ies): Yulchi TAKAMINE  Additional name(s) of conveying party(ies) attached?   yes   @no    Address: 28-10 Tenjin 2-chome, Nanackakyo-shi, Kyoto-fu 817-85   Jassen  Name of Conveyance:	Form PTO-1595	
PATENTS ONLY  To the Intervals Communication Communication of Communication Communication of Communication Communi	1-31-92	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Off
To be instantia Commeasioner of Palasios and Traitemarks: Please record the shaded original dosignated for copy harsed.  Name of conveying party(los): Yuich! TAKAMINE  Additional name(s) of conveying party(los) attached?   yee   Eno      Additional name(s) of conveying party(los) attached?   yee   Eno		
Name of conveying party(les): Yulchi TAKAMINE  Additional name(s) of conveying party(les) attached?		·
Additional name(s) of conveying party(ies) attached?		
Assignment	Additional name(s) of conveying party(ies) attached? ☐ yes 図no	(2a.) Name: Murata Manufacturing Co., Ltd. Address: 26-10 Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555,
If this document is being filed together with a new application, the execution date of the application is:  A. Patent Application No.(s) 10/665,107  B. Patent No.(s)  Additional numbers attached	Assignment	NameAddress:
If this document is being filed together with a new application, the execution date of the application is:  A. Patent Application No.(s) 10/665,107  B. Patent No.(s)  Additional numbers attached	4. Application number(s) or patent number(s): 10/665,107	
A. Patent Application No.(s) 10/665,107  B. Patent No.(s)  Additional numbers attached   yes   Ino  Additional numbers attached   yes   Ino  5. Name and addross of party to whom correspondence concerning document should be mailed:  Name: Joseph R. Keating, Esq., Internal Address: KEATING & BENNETT LLP  Street Address: 10/400 Eaton Place, Suite 312  City: Fairfax   State: VA   ZIP   22030  DO NOT USE THIS SPACE  DO NOT USE THIS SPACE  December 15, 2003  Jame of Person Signing  Total number of pages comprising cover sheet, attachments and document and documents to be recorded with required cover shoot information to:  Assistant Commissioner for Patents Box Assignment		tion date of the application is:
Additional numbers attached		
5. Name and address of party to whom correspondence concerning document should be malled:  Name: Joseph R. Kealing, Esq. Internal Address: KEATING & BENNETT LLP  Street Address: 10400 Eaton Place, Suite 312 City: Fairfax State: VA ZIP 22030  DO NOT USE THIS SPACE  1. Statement and signature.  Total number of applications and patents involved: one document should be malled:  Authorized to be charged to credit card with Credit Card Paym Form (PTO-2038) Authorized to be charged to deposit account number: 50-1353  DO NOT USE THIS SPACE  1. 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 stops of Person Signing  Total number of pages comprising cover sheet, attachments and document and document to be recorded with required cover sheet information to:  Assistant Commissioner for Patents  Box Assignment		
Address: Street Address: State: VA ZIP 22030    Street Address: State: VA ZIP 22030   City: Fairfax State: VA ZIP 2003   City: Fairfax State: VA Z		The state of the s
Statement and signature.  o 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 loseph R. Keating, Reg. No. 37,368    December 15, 2003     Name of Person Signing   Signature     Total number of pages comprising cover sheet, attachments and document lose     Assistant Commissioner for Patents     Box Assignment   Box TENT	Name: Joseph R. Keating, Esq. Internal Address: KEATING & BENNETT LLP  Street Address: 10400 Eaton Place, Suite 312 City: Fairfax State: VA ZIP 22030	7. Total fee (37 CFR 3.41):\$ 40.00  Enclosed  Authorized to be charged to credit card with Credit Card Payment Form (PTO-2038)  Authorized to be charged to deposit account  8. Deposit account number: 50-1353
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 loseph R. Keating, Reg. No. 37,368    December 15, 2003     Signature     Total number of pages comprising cover sheet, attachments and document lose of the original document lose of pages comprising cover sheet, attachments and document lose of pages comprising cover sheet, attachments and document lose of pages of pages of pages lose of pag	DO NOT USE	E THIS SPACE
alf documents to be recorded with required cover sheet information to:  Assistant Commissioner for Patents  Box Assignment	Name of Person Signing  Signat	December 15, 2003 ture Date
	alf documents to be recorded with required cover sheet information to:  Assistant Commi	ssioner for Patents
700056793 REEL: 014195 FRAME: 0141	Washington	n, D.C. 20231 PAIENI

Attorney Docket No.: 36856.1127

## ASSIGNMENT (WORLDWIDE)

WHEREAS, I, Yuichi TAKAMINE (hereinafter referred to as ASSIGNOR), have invented and own a certain invention entitled **SURFACE ACOUSTIC WAVE**DEVICE AND COMMUNICATION DEVICE for which application for Letters Patent of the United States has been

	executed on even date herewith;
<u> </u>	filed on September 19, 2003 as Serial No. 10/665, 107
	as Serial No. 10/665, 107

WHEREAS, Murata Manufacturing Co., Ltd., 26-10, Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555 JAPAN (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and the United States Letters Patent to be obtained therefor;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the full and exclusive right, title and interest to the said invention and all Letters Patent of the United States to be obtained therefor on said application or any continuation, division, renewal, substitute or reissue thereof for the full term or terms for which the same may be granted; and all Letters Patent and applications therefor through the world, including all the rights accruing by virtue of the International Convention for the Protection of Industrial Property.

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNOR and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

Dated: / /0/8/2003	Zuchi Fahomine
	Yuichi TAKAMINE

PATENT REEL: 014195 FRAME: 0142

**RECORDED: 12/15/2003**