TRADEMARK OFFICE 09-22-2003 Form PTO-1595 U.S. DEPARTMENT OF COMMERCE 1-31-92 **IEET** To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereor Name of conveying party(ies): Tadashi NOMURA, Hajime YAMADA, Name and address of receiving party(ies): and Ryuichi KUBO Additional name(s) of conveying party(ies) attached? ☐ yes 図no Name: Murata Manufacturing Co., Ltd. Address: 26-10 Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555 (2b.) Name of Conveyance: Name Address: **➤** Assignment Additional name(s) & address(es) attached? □yes ☑no Other Execution Date: September 3, 2003 10656246 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) B. Patent No.(s) Additional numbers attached

yes •□no Name and address of party to whom correspondence concerning 6. Total number of applications and patents involved: one document should be mailed: Name: Joseph R. Keating, Esq. Internal Address: KEATING & BENNETT LLP 7. Total fee (37 CFR 3.41):.....\$ 40.00 Street Address: 10400 Eaton Place, Suite 312 City: Fairfax State: VA ZIP 22030 Enclosed 5/2003 HDEMESSI **00000031 10656246** Authorized to be charged to credit card with Credit Card Payment Form (PTO-2038) 40.00 DP 1:808:0 Authorized to be charged to deposit account 8. Deposit account number: 50-1353 DO NOT USE THIS SPACE 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. Joseph R. Keating, Reg. No. 37,368 September 8, 2003 Name of Person Signing Signature Total number of pages comprising cover sheet, attachments and document: 3

> **Assistant Commissioner for Patents Box Assignment** Washington, D.C. 20231

Mail documents to be recorded with required cover sheet information to:

PATENT REEL: 014497 FRAME: 0305

Attorney Docket No.: 36856.1117

ASSIGNMENT (WORLDWIDE)

WHEREAS, We, Tadashi NOMURA, Hajime YAMADA, and Ryuichi KUBO (hereinafter referred to as ASSIGNOR), have invented and own a certain invention entitled PIEZOELECTRIC RESONATOR, PIEZOELECTRIC FILTER, AND COMMUNICATION APPARATUS for which application for Letters Patent of the United States has been

X	executed on even date herewith;		
	filed on	as Serial No	

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 u	he burboses hereor.	
Dated:	9/3/2003 8/ 9/3/2003	Tadashi nomura
		Tadashi NOMURA
Dated:	9/3/2003	Hajha Zamla
	·	

Hajime YAMADA

PATENT REEL: 014497 FRAME: 0306 Dated: 9/3/2003 Ryuichi Kubo
Ryuichi KUBO

RECORDED: 09/08/2003

PATENT **REEL: 014497 FRAME: 0307**