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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.	
Name of conveying party(ies): Tetsuo TAKESHIMA, Yuji KOSUGI, and Manabu SUMITA Additional name(s) of conveying party(ies) attached? □ yes 図no	2. Name and address of receiving party(ies): (2a.) Name: Murata Manufacturing Co., Ltd. Address: 26-10 Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555, Japan
3. Name of Conveyance: Assignment	(2b.) Name_ Address: Additional name(s) & address(es) attached? □yes ⊠no
Execution Date: June 26, 27, and 28, 2002 4. Application number(s) or patent number(s):	1188895
If this document is being filed together with a new application, the execution	n date of the application is:
A. Patent Application No.(s)	B. Patent No.(s)
Additional numbers at	ached □ ves •□no
Additional numbers attached in yes valid	
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Joseph R. Keating, Esq. Internal Address: KEATING & BENNETT LLP Street Address: 10400 Eaton Place, Suite 312 City: Fairfax State: VA ZIP 22030 D9/2002 SDIRETAL 00000048 10186895 FC:581 40.00 0F	6. Total number of applications and patents involved: one 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
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Mail documents to be recorded with required cover sheet information to: Assistant Commi	July 2, 2002

PATENT REEL: 013074 FRAME: 0016

RECORDED: 07/02/2002

Attorney Docket No.: 36856.763

ASSIGNMENT (WORLDWIDE)

WHEREAS, We, Tetsuo TAKESHIMA, Yuji KOSUGI, and Manabu SUMITA (hereinafter referred to as ASSIGNOR), have invented and own a certain invention entitled PIEZOELECTRIC ELECTROACOUSTIC TRANSDUCER for which application for Letters Patent of the United States has been executed on even date herewith: filed on _____ as Serial No. WHEREAS, Murata Manufacturing Co., Ltd., 26-10, Tenjin 2-chome, Nagaokakyoshi, Kvoto-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: 6/26/2002

Dated: 6/27/2002 Tetsuo Takeshima
Tetsuo TAKESHIMA Dated: 6/28/2002

> PATENT REEL: 013074 FRAME: 0017