03-18-1999

| To | the | Hon | orab | le | Com |
|----|-----|-----|------|----|-----|
|----|-----|-----|------|----|-----|

1. Name of conveying Hiroaki KAIDA



100987363

ase record the attached original documents or copy thereof.

Name and address of receiving party(ies):
Murata Manufacturing Co., Ltd., Ltd.
26-10 Tenjin 2-chome, Nagaokakyo-shi,
Kyoto-fu 617-8555,
JAPAN



| | JC52 03 |
|--|---|
| Additional names of conveying parties attached? Yes | No 🗷 Additional name(s) and address(es) attached? Yes No 🗷 |
| 3. Nature of Conveyance | ☐ Other: |
| Additional numbers attached | Additional numbers attached ☐ Yes ☒No 7. Total fee (37CFR 3.41)\$ 40.00 ☒ Enclosed ☐ Charge our Deposit Account No. 07-1855 for deficiency in the above fee, and credit any overpayment thereto. |
| 6. Total number of applications and patents involved: | 8. Deposit Account No.: 07-1855 (Attach duplicate copy of this page if paying by deposit account.) |
| is a true copy of the original document. Joseph R. Keating Reg. No. 37,368 Name of person Signing 36856.172 | foregoing information is true and correct and any attached copy March 8, 1999 Date Total number of pages comprising cover sheet: 2 |
| 03/17/1999 DNGUYEN 00000291 09264096 Do n Mail documents to be recorded with required co | over sheet information to: |

Commissioner of Patents and Trademarks
Box Assignments
Washington D.C. 20231

Attorney Docket No.: 36856.172

ASSIGNMENT (WORLDWIDE)

WHEREAS, I, Hiroaki KAIDA (hereinafter referred to as ASSIGNOR), have invented and own a certain invention entitled METHOD OF MANUFACTURING A PIEZOELECTRIC RESONATOR 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, 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: Hiroaki Kaida

March 5, 1998

Hiroaki KAIDA

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> PATENT REEL: 9814 FRAME: 0686

RECORDED: 03/08/1999