U.S. PATENT AND TRADEMARK OFFICE

Form PTO-1595 1-31-92	3 - 2002 U.S. DEPARTMENT OF COMMER Patent and Trademark Of
RE ⁽	
(
Name of conveying party(ies): Takahiro KURIHARA , Masao GAMO , and Yoshihiro IKEDA 3 - 4 - 5 Z Additional name(s) of conveying party(ies) attached? □ yes ☑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 (2b.) Name Address:
Assignment Merger Security Agreement Change of Name Other Execution Date: March 7, 2002	Additional name(s) & address(es) attached? □yes 図no
4. Application number(s) or patent number(s): 10,092 4	
If this document is being filed together with a new application, the executi	
A. Patent Application No.(s) Additional numbers a	B. Patent No.(s) ttached □ ves •□no
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 2002 Emplied 00000012 100092494 40.00 80	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 Payme Form (PTO-2038) Authorized to be charged to deposit account 8. Deposit account number: 50-1353
	E THIS SPACE
Joseph R. Keating, Reg. No. 37,368 Name of Person Signing Signate Mail documents to be recorded with required cover sheet information to:	otal number of pages comprising cover sheet, attachments and document
Assistant Comm Box A	nissioner for Patents ssignment on, D.C. 20231

PATENT REEL: 012713 FRAME: 0851

RECORDED: 03/08/2002

Attorney Docket No.: 36856.629



ASSIGNMENT (WORLDWIDE)

WHEREAS, We, Takahiro KURIHARA, Masao GAMO and Yoshihiro IKEDA (hereinafter referred to as ASSIGNOR), have invented and own a certain invention entitled DUAL MODE FILTER 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.
3/7/2002 Dated:
Dated:
Dated: 3/7/2002 Masar Hamo
Masao GAMO
Dated: 3/7/2002 Zoshihiro Skeda
Yoshihiro IKEDA

PATENT REEL: 012713 FRAME: 0852