04-05-1999 ATENTS F EET MAR 2 6 1999 101001714 ₿xḥe Honorable ∰mmissioner of Patents and Trademarks: Please record the attached original document or copy thereof. 1. Name of conveying party(ies): 2. Name and Address of receiving party(ies): Atsushi SAITOH Murata Manufacturing Co., Ltd., Dept. A170, 26-10, Tenjin 2-chome, Toru TANIZAKI Hiroshi NISHIDA Ikuo TAKAKUWA Nagaokakyo-shi, Kyoto-fu Yoshinori TAGUCHI 617-8555, Japan Individual Foreign Corporation Additional names(s) of conveying party(ies) attached? NO Additional name(s) & address(es) attached? NO 3. Nature of conveyance: Assignment Execution Date: January 25, 1999 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. Application No.(s) B. Patent No.(s) 09/216,575 Additional numbers attached? NO 5. Name and address of party to whom 6. Total number of documents involved: correspondence concerning document should One be mailed: OSTROLENK, FABER, GERB & SOFFEN, LLP 7. Total fee (37 CFR 3.41): \$ 40.00 1180 Avenue of the Americas New York, New York 10036-8403 Enclosed as part of Check No. In the event the actual fee is greater than the payment submitted or is inadvertently not enclosed or if any additional fee due is not paid, the Patent and Trademark Office is authorized to charge the underpayment to Deposit Account No. 15-0700. 00000049 09216575 DO NOT USE THIS SPACE 8. 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. Louis C. Dujmich Name of Person Signing Total number of pages including cover sheet, attachments, and document: 2

> PATENT REEL: 9854 FRAME: 0993

WHEREAS, I (We), Atsushi SAITOH, Toru TANIZAKI, Hiroshi NISHIDA, Ikuo TAKAKUWA, and Yoshinori TAGUCHI as assignor(s), have invented certain improvements in NON RADIATIVE DIELECTRIC WAVEGUIDE HAVING A PORTION FOR LINE CONVERSION BETWEEN DIFFERENT TYPES OF NON RADIATIVE DIELECTRIC WAVEGUIDE for which an application for United States Letters Patent has been executed by me (us) of even date herewith; and

WHEREAS, Murata Manufacturing Co., Ltd., Dept. A170, 26-10, Tenjin 2-chome, Naqaokakyo-shi, Kyoto-fu, Japan as assignee, is desirous of acquiring all right, title and interest in and to said invention and any Patent that may be granted therefor.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, I (We), as assignor(s), hereby sell, assign and set over to said assignee the entire right, title and interest for the United States and all other countries in and to said invention and the aforesaid application for Patent, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States and all other countries, including all rights of priority from the filing of said application, and all rights for past infringement, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said inventions or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for myself (ourselves) and my (our) legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Patent on said inventions and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said inventions, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to assist assignee, its successors, assigns and nominees to obtain patent protection for said invention in the United States and all other countries, the expenses incident to said applications to be borne and paid by said assignee.

January 25, 1998

January 25, 1999

Date: January 25, 1997

Hiroshi hishida

Yoshinori TAGI

LEGALIZATION RECOMMENDED

MISC\283452

PATENT REEL: 9854 FRAME: 0994

RECORDED: 03/26/1999