| 02-11-2003 <u>AV/S81.</u> | 40 | J17/1666/761/7 | TO 2 1 JAN 201 | | |
|---|---|---|------------------------------------|--|--|
| RECORDATION PATE | RECORDATION FORM COVER SHEET PATENTS ONLY | | Patent and Trademark Office PATENT | | |
| 1,102361364 s and Trademarks: F | Please record the attached | | | | |
| Submission Type New Resubmission (Non-Recordation) Document ID # Correction of PTO Error Reel # Frame # Corrective Document Reel # Frame # | Conveyance Type Assignment License Merger Security Agree Change of Nar Other: | e ment | | | |
| Conveying Party(ies) 1. Muneaki MUKUDA 2. Takayuki INUZUKA 3. Naosi YAMADA 4. Hideki ASAO 5. Kazuhisa HENMI 6. Mark if Additional Names of Conveying Parties Att | ached | Execution Date January 7, 2003 January 7, 2003 January 7, 2003 January 7, 2003 January 7, 2003 | (s) | | |
| Receiving Party Name Mitsubishi Denki Kabushiki Kaisha Name Address 2-3, Mrunouchi 2-chome Address Chiyoda-ku Address Tokyo Japan City State Mark if Additional Names of Receiving Parties Atta | /Country | 100-8310 Zip Code | 333 3 54 | | |
| Correspondent Name and Address Jeffrey A. Wyand Leydig, Voit & Mayer 700 Thirteenth St., N.W. Suite 300 Washington, D.C. 20005-3960 | | Telephone: (202) 737-6770 Facsimile: (202) 737-6776 Attorney Docket No. 402474/SAKAI | | | |
| Pages Enter the total number of pages of the atta | iched conveyance docum | | | | |
| Application Number(s) or Patent Number(s) Enter either the Patent Application Number or the Patent Number or the | ا ber (DO NOT ENTER BOTH nu |] Mark if additional rumbers for the same pro | | | |
| Patent Application Numbers | | Patent Numbers | | | |
| | | | | | |
| | | | | | |
| If this document is being filed together with a new Pate application was signed by the first named executing invalent Cooperation Treaty (PCT) | | date the patent | Month Day Year January 7, 2003 | | |
| Enter PCT application number only if a U.S. Application | n PCT | PCT | PCT | | |
| Number has not been assigned. | PCT/JP02/05742 | | 101 | | |
| | PCT | PCT | PCT | | |
| Number of Properties | Enter the t | otal number of prop | erties involved: 1 | | |
| Fee Amount Method of Payment: ☐ Enclosed is a check in the amount of \$ ☒ Charge Deposit Account No. 12-1216 Authorization to Charge Additional Fees to Dep | | operties Listed (37 (6: ⊠ Yes □ No | · | | |
| 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. Charges to deposit account are authorized, as indicated herein. | | | | | |
| Jeffrey A. Wyand | en Altrud | anuary | 7. | | |
| Name of Person Signing X 21/1) | Signature / / | / /n | ate | | |

Assignment Tml P1

PATENT

REEL: 013730 FRAME: 0812

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt of which is acknowledged, the undersigned,

| Mune | aki MUKUDA, Takayuki INUZUKA, Naosi YAMADA, Hideki ASAO and | | | |
|--|--|--|--|--|
| Kazu | hisa HENMI | | | |
| of <u>c/o</u> | Mitsubishi Denki Kabushiki Kaisha | | | |
| sells, | , Marunouchi 2-chome, Chiyoda-ku, TOKYO 100-8310 JAPAN assigns, and transfers to | | | |
| Mits | ubishi Denki Kabushiki Kaisha | | | |
| of <u>2-3</u> | , Marunouchi 2-chome, Chiyoda-ku, TOKYO 100-8310 JAPAN | | | |
| | ssignee), its successors and assigns, the entire right, and interest in and to: | | | |
| (i) | the application for United States Letters Patent entitled: | | | |
| WAVEGUIDE AND MANUFACTURING METHOD THEREOF | | | | |
| - | which was executed by the undersigned on, 2003 or was filed on and accorded Serial No (the Application); | | | |
| (ii) | any and all inventions and improvements that are described in the Application; | | | |
| (iii) | any and all United States Letters Patents that may be granted on the Application (the Patent); | | | |

(v) all benefits under the International Convention for the Protection of Industrial Property.

(iv)

and

any and all divisions, continuations, reexaminations,

reissues, or extensions of the Application or the Patent;

I authorize the Assignee and its agents to insert in this instrument the filing date and serial number of the Application.

I authorize and request the Commissioner of Patents to issue any and all Letters Patent, when granted, to the Assignee.

PATENT REEL: 013730 FRAME: 0813 Further, it is agreed that, when requested, without charge to, but at the expense of, the Assignee, the undersigned will execute all divisional, continuing, or reissue patent applications; execute all additional assignments and other writings, including reissue and reexamination papers; and provide all reasonable assistance requested by the Assignee to secure and maintain appropriate patent protection for any invention described in the Application.

| INVENTOR | Date | | |
|--------------------------------------|------|-------------|------|
| Muheaki Mukuda Muneaki MUKUDA | Jan. | 7, | 2003 |
| Takayuki Inuzuka Takayuki INUZUKA | Jan. | 7, | 2003 |
| Naosi YAMADA n. y. January 7, 2003 | Jan. | 7, | 2003 |
| Hideki ASAO | | 7, | 2003 |
| Kazuhisa HENMI | Jan. | 7, | 2003 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

PATENT REEL: 013730 FRAME: 0814