FORM PTO-1595 (Rev. 6/93)

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Attorney's Docket No. 018773-024

| To the Honorable Commissioner of Patents and Trademarks. | Please record the attached original documents or copy there e. |
|---|---|
| 1. Name of conveying party(ies): Akihiro GOTO, Hirochika KAWAGUCHI, Yoshiharu TAKAHASHI, Takao TAKAHASHI, Takashi ARITA, Satoshi OOKYUU, and Hirokazu TAKI Additional name(s) of conveying party(ies) attached? [] Yes [X] No 3. Nature of conveyance: [X] Assignment [] Merger [] Security Agreement [] Change of Name Other: Execution Date: Nov. 11, 12, 15, and 17, 1999 | 2. Name and address of receiving party(ies): Name: Mitsubishi Denki Kabushiki Kaisha Address: 2-3, Marunouchi 2-chome Chiyoda-ku Tokyo 100-8310 - Japan Additional name(s) & address(es) attached? [Yes X No |
| A. Patent Application No.(s) | e execution date of the application is: Nov. 11, 12, 15 & 7, 1999 B. Patent No.(s) |
| Name and address of party to whom correspondence concerning document should be mailed: | hed? [] Yes [X] No 6. Total number of applications and patents involved: 1 |
| Name: Platon N. Mandros Address: Burns, Doane, Swecker & Mathis, L.L.P. P.O. Box 1404 12/22/1999 MPEOPLES 0000002 V 9245 502 313-1404 Alexandria, V 9245 502 313-1404 40.00 Op | 7. Total fee (37 CFR 3.41): \$40.00 [X] Enclosed [X] Authorized to be charged to deposit account, if necessary 8. Deposit account number: 02-4800 |
| DO NOT USE | ETHIS SPACE and correct and any attached copy is a true copy of the original document. December 8, 1999 Date Total number of pages including cover sheet, attachments, and document: 3 |

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

(09/99)

O / 8773 - O 24/ Attorney's Docket No.

ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by __AKIHIRO GOTO, HIROCHIKA KAWAGUCHI, and YOSHIHARU TAKAHASHI residing at c/o Mitsubishi Denki Kabushiki Kaisha. 2-3. Marunouchi 2-chome. Chiyoda-ku. Tokyo 100-8310 JAPAN. TAKAO TAKAHASHI TAKASHI ARITA, and SATOSHI OOKYUU residing at c/o Kabushiki Kaisha KDL. Kushiyo 3-chome 13-21.Kawanishi-shi, Hyogo-ken 666-0024. Japan. and HIROKAZU TAKI residing at Yonezaki-cho 12-35. Sijonawate-shi, Osaka-fu 575-0032. JAPAN (hereinafter referred to as the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in __CIRCUIT WIRING SYSTEM. CIRCUIT WIRING METHOD, SEMI-CONDUCTOR PACKAGE, AND SEMI-CONDUCTOR PACKAGE SUBSTRATE set forth in an application for Letters Patent of the United States, [] which is a provisional application to be filed herewith; [x] which is a non-provisional application having an oath or declaration executed on even date herewith prior to filing of application; [] bearing Application No. ______, and filed on ______

WHEREAS, Mitsubishi Denki Kabushiki Kaisha a corporation duly organized under and pursuant to the laws of Japan , and having its principal place of business at 2-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8310 JAPAN. (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the Unite States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations—in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of

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execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Burns, Doane, Swecker & Mathis, L.L.P. of Alexandria, Virginia, to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

| Date | Nov. 11, 1999 | Name o | f | Assignor AKIHIRO GOTO |
|------|---------------|--------|----|--|
| Date | Nov. 17, 1444 | Name o | £ | ASSIGNOT HIRDCHIKA KAWAGCCHI HIROCHIKA KAWAGUCHI |
| Date | Nov. 11, 1999 | Name o | f | Assignor <u>Yoshiharu Takahashi</u> YOSHIHARU TAKAHASHI |
| Date | NOV.12.1999 | Name o | f | Assignor <u>TAKAO TAKAHASHI</u> TAKAO TAKAHASHI |
| Date | NOV. 12. 1999 | Name o | £ | Assignor <u>TAKASHI ARITA</u> TAKASHI ARITA |
| Date | Nov. 12. 1999 | Name o | of | Assignor SATOSHI OOKYUU SATOSHI OOKYUU |
| Date | Nov. 15.1999 | Name o | of | Assignor HIROKAZU TAKI |
| Date | | Name o | of | Assignor |

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