ASSIGNMENT REC





To: Honorable Commissioner of Patents and Trademarks:

Name of conveying party(ies)

1.

Please record the attached original document(s) or copy thereof.

| | a) | Akihiro KUSAKA | | | | |
|------|--|--|---------------------------------------|--|--|--|
| 2. | Name a) | e and address of receiving party(ies): Name: ALPS ELECTRIC CO., LTD. Address: 1-7 Yukigaya, Otsuka-cho Ota-ku, Tokyo JAPAN | | | | |
| 3. | | Assignment Security Agre Other ution Date: Dece | eement | Merger Change of Name License Agreement | | |
| 4. | Application Number(s) or Patent Number(s): The title of the (new) application is: | | | | | |
| PRIN | ITED C | IRCUIT BOARI AN | O WITH WIRING PAT D PROCESS FOR MA | TERN FORMED THEREON BY SCREEN PRINTING NUFACTURING THE SAME | | |
| 5. | Please send all correspondence concerning this (these) documents to: | | | | | |
| | | | Beyer Weaver & T | homas, LLP | | |

Total number of applications and patents involved: 1 6.

P.O. Box 778

Ph: (650) 961-8300 Fax: (650) 961-8301

Berkeley, CA 94704-0778

(Customer Number: 022434)

Total fee (37 CFR 3.41): \$40.00 7.

Any additional fees are authorized to be charged to Deposit Account No. 500388 (Order No. ALPSP062)

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.

Date: January 2, 2002 01/11/2002 RMEBRAHT 00000042 10037733

40.00 OP 02 FC:581

Steve D Beyer

Registration No. 31,234

(Revised 01/96)

ASSIGNMENT

| | WHEREAS, $_$ | Akihiro Kusaka | , hereinafter called the |
|----------|---------------------|----------------------------|------------------------------------|
| "Assigno | or", have made the | invention described in the | e United States patent application |
| entitled | PRINTED CIRCUI | T BOARD WITH WIRING PA | ATTERN FORMED THEREON BY |
| SCREE | N PRINTING AND | PROCESS FOR MANUFACTUR | RING THE SAME , |
| executed | l by Assignor on th | ne same date as this Assig | nment: |

WHEREAS, ALPS ELECTRIC CO., LTD., a corporation organized and existing under the laws of Japan, having a place of business at 1-7 Yukigaya, Otsukacho, Ota-ku, Tokyo, Japan, hereinafter called the "Assignee", desires to acquire the entire right, title and interest in and to the invention and the patent application identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignor hereby covenant and agree, for both the Assignor and the Assignor's legal representatives, that the Assignor will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignor will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

PATENT REEL: 12450 FRAME: 0832 The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignor has executed this agreement.

DATE: December 17, 2001

Akihiro Kusaka

Inventor: Akihiro Kusaka

WITNESSED:

DATE: December 17, 2001

DATE: December 17, 2001

Takako Mizukoshi

RECORDED: 01/02/2002

PATENT REEL: 12450 FRAME: 0833