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05-12-1998



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TO THE ASSISTANT COMMISSIONER  
FOR PATENTS  
WASHINGTON, D.C. 20231

PATENT TRADEMARK AND  
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Attorney  
Reference: MAEDA 3277.01

BOX ASSIGNMENT

REQUEST FOR RECORDING AND COVER SHEET UNDER 37 C.F.R. 3.28 AND 3.31

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

1. Name of parties conveying the interest:

Yasuhiro SHIN and Teruyuki FUJII

2. Name and address of party receiving the interest:

Oki Electric Industry Co., Ltd.  
7-12, Toranomom 1-chome, Minato-ku, Tokyo, Japan

3. Description of the interest conveyed or transaction to be recorded:

Assignment       Other:

4. Application Number: To be Assigned

09/069941

Patent Number:

Registration Number:

Document filed together with a patent application executed on  
April 2, 1998

5. Address correspondence concerning this request to: SPENCER & FRANK  
Suite 300 East, 1100 New York Avenue, N.W., Washington, D.C. 20005-3955

6. Number of Applications, Patents or Registrations and total fee:

Patents: 1 patent rights @ \$40      Total: \$40.00

If no fee is attached, or if a greater or lesser fee is required, please  
charge or credit our Account No. 19-3700.

7. Date of execution of document: April 2, 1998

8. If document is an assignment of a trademark right to an assignee who  
is not domiciled in the United States, such assignee has designated a  
domestic representative  
 per attached designation     other:

9. To the best of knowledge and belief of the undersigned, the foregoing  
information is true and correct and any attached copy is a true copy of  
the original document.

10. Date: April 30, 1998

*Robert J. Frank*

Name: Robert J. Frank

Registration Number: 19,112

PATENT

REEL: 9149 FRAME: 0516

RJF/jh

05/06/1998 GWSHNS 0000033 02059941

02 FC:581

40.00 DP

U.S. PATENT  
09/069941  
05/12/98

ASSIGNMENT  
OF APPLICATION FOR UNITED STATES LETTERS PATENT

Attorney Docket  
MAEDA 3277.01

WHEREAS Yasuhiro SHIN and Teruyuki FUJII  
c/o Oki Electric Industry Co., Ltd.  
7-12, Toranomon 1-chome, Minato-ku, Tokyo, Japan  
hereinafter (collectively) referred to as the assignor, has invented a certain improvement  
relating to KEY INTERFACE CIRCUIT WITH REDUCED NUMBER OF INPUT TERMINALS

for which said assignor has caused an application for United States Letters Patent to be prepared,

[x] the inventor declaration for said application being executed concurrently with the execution of this instrument; said application to be filed in the United States Patent and Trademark Office;

[ ] said application having been filed in the United States Patent and Trademark Office on \_\_\_\_\_, Serial Number [if known] \_\_\_\_\_;

[ ] said application having been filed under the Patent Cooperation Treaty on \_\_\_\_\_, Serial No. \_\_\_\_\_, the United States of America being designated.

AND WHEREAS Oki Electric Industry Co., Ltd.  
7-12, Toranomon 1-chome, Minato-ku, Tokyo, Japan

\_\_\_\_\_, hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the entire and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any all divisions and continuations thereof, and the said invention and any all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

EXECUTED, this 2nd day of April, 1998.

WITNESSES:

ASSIGNOR:

Signature: Junji Kashiwada

Signature: Yasuhiro SHIN

Name: Junji Kashiwada

Name: Yasuhiro SHIN

Address: c/o Oki Electric Industry Co., Ltd.  
7-12, Toranomon 1-chome, Minato-ku,  
Tokyo, Japan

Signature: Teruyuki Fujii

Name: Teruyuki FUJII

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_