

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| SUBMISSION TYPE:                                                                                                                                                                                                                                                                                            | NEW ASSIGNMENT                |               |                             |                     |                               |                  |                    |                |            |              |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------|-----------------------------|---------------------|-------------------------------|------------------|--------------------|----------------|------------|--------------|----------|
| NATURE OF CONVEYANCE:                                                                                                                                                                                                                                                                                       | ASSIGNMENT                    |               |                             |                     |                               |                  |                    |                |            |              |          |
| CONVEYING PARTY DATA                                                                                                                                                                                                                                                                                        |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| <table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Hiroyuki TAKAHASHI</td><td>03/31/2010</td></tr><tr><td>Masahiro YOSHIDA</td><td>03/31/2010</td></tr><tr><td>Noriaki TAKEDA</td><td>03/31/2010</td></tr></tbody></table>                                        |                               | Name          | Execution Date              | Hiroyuki TAKAHASHI  | 03/31/2010                    | Masahiro YOSHIDA | 03/31/2010         | Noriaki TAKEDA | 03/31/2010 |              |          |
| Name                                                                                                                                                                                                                                                                                                        | Execution Date                |               |                             |                     |                               |                  |                    |                |            |              |          |
| Hiroyuki TAKAHASHI                                                                                                                                                                                                                                                                                          | 03/31/2010                    |               |                             |                     |                               |                  |                    |                |            |              |          |
| Masahiro YOSHIDA                                                                                                                                                                                                                                                                                            | 03/31/2010                    |               |                             |                     |                               |                  |                    |                |            |              |          |
| Noriaki TAKEDA                                                                                                                                                                                                                                                                                              | 03/31/2010                    |               |                             |                     |                               |                  |                    |                |            |              |          |
| RECEIVING PARTY DATA                                                                                                                                                                                                                                                                                        |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| <table border="1"><tr><td>Name:</td><td>NEC Electronics Corporation</td></tr><tr><td>Street Address:</td><td>1753 Shimonumabe, Nakahara-ku</td></tr><tr><td>City:</td><td>Kawasaki, Kanagawa</td></tr><tr><td>State/Country:</td><td>JAPAN</td></tr><tr><td>Postal Code:</td><td>211-8668</td></tr></table> |                               | Name:         | NEC Electronics Corporation | Street Address:     | 1753 Shimonumabe, Nakahara-ku | City:            | Kawasaki, Kanagawa | State/Country: | JAPAN      | Postal Code: | 211-8668 |
| Name:                                                                                                                                                                                                                                                                                                       | NEC Electronics Corporation   |               |                             |                     |                               |                  |                    |                |            |              |          |
| Street Address:                                                                                                                                                                                                                                                                                             | 1753 Shimonumabe, Nakahara-ku |               |                             |                     |                               |                  |                    |                |            |              |          |
| City:                                                                                                                                                                                                                                                                                                       | Kawasaki, Kanagawa            |               |                             |                     |                               |                  |                    |                |            |              |          |
| State/Country:                                                                                                                                                                                                                                                                                              | JAPAN                         |               |                             |                     |                               |                  |                    |                |            |              |          |
| Postal Code:                                                                                                                                                                                                                                                                                                | 211-8668                      |               |                             |                     |                               |                  |                    |                |            |              |          |
| PROPERTY NUMBERS Total: 1                                                                                                                                                                                                                                                                                   |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| <table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12773404</td></tr></tbody></table>                                                                                                                                                |                               | Property Type | Number                      | Application Number: | 12773404                      |                  |                    |                |            |              |          |
| Property Type                                                                                                                                                                                                                                                                                               | Number                        |               |                             |                     |                               |                  |                    |                |            |              |          |
| Application Number:                                                                                                                                                                                                                                                                                         | 12773404                      |               |                             |                     |                               |                  |                    |                |            |              |          |
| CORRESPONDENCE DATA                                                                                                                                                                                                                                                                                         |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| Fax Number: (202)672-5399<br><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>                                                                                                                                                                                           |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| Phone: 202-672-5300                                                                                                                                                                                                                                                                                         |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| Email: rhale@foley.com                                                                                                                                                                                                                                                                                      |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| Correspondent Name: FOLEY AND LARDNER LLP                                                                                                                                                                                                                                                                   |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| Address Line 1: 3000 K STREET NW                                                                                                                                                                                                                                                                            |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20007                                                                                                                                                                                                                                                      |                               |               |                             |                     |                               |                  |                    |                |            |              |          |
| ATTORNEY DOCKET NUMBER:                                                                                                                                                                                                                                                                                     | 042264-0255                   |               |                             |                     |                               |                  |                    |                |            |              |          |
| NAME OF SUBMITTER:                                                                                                                                                                                                                                                                                          | George C. Beck                |               |                             |                     |                               |                  |                    |                |            |              |          |
| Total Attachments: 2<br>source=Assignment#page1.tif<br>source=Assignment#page2.tif                                                                                                                                                                                                                          |                               |               |                             |                     |                               |                  |                    |                |            |              |          |

OP \$40.00 12773404

501169070

PATENT  
REEL: 024347 FRAME: 0228

## ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

NEC Electronics Corporation  
1753 Shimonumabe, Nakahara-ku,  
Kawasaki, Kanagawa 211-8668, Japan

(hereinafter ASSIGNEE) its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions in and to this invention relating to

### WORD LINE SELECTION CIRCUIT AND ROW DECODER

as set forth in this United States Patent Application

*Check  
one*

☒ executed concurrently herewith  
☐ executed on \_\_\_\_\_  
☐ Serial No. 12/773,404 Filed 5/4/2010  
and

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the International Convention and any other international agreement to which the United States adheres; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

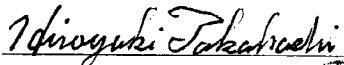
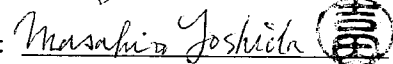
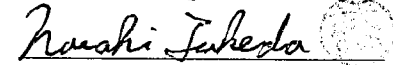
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ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

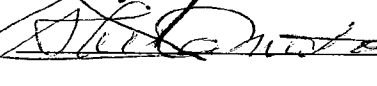
ASSIGNOR HEREBY GRANTS to the law firm of **Foley & Lardner LLP** the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of **Foley & Lardner LLP** do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

**NAME AND SIGNATURE OF INVENTOR(S)**

|                                  |                                                                                                      |                             |
|----------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------|
| NAME: <u>Hiroiyuki TAKAHASHI</u> | SIGNATURE: <u></u> | DATE: <u>March 31, 2010</u> |
| NAME: <u>Masahiro YOSHIDA</u>    | SIGNATURE: <u></u> | DATE: <u>March 31, 2010</u> |
| NAME: <u>Noriaki TAKEDA</u>      | SIGNATURE: <u></u> | DATE: <u>March 31, 2010</u> |
| NAME: _____                      | SIGNATURE: _____                                                                                     | DATE: _____                 |
| NAME: _____                      | SIGNATURE: _____                                                                                     | DATE: _____                 |
| NAME: _____                      | SIGNATURE: _____                                                                                     | DATE: _____                 |
| NAME: _____                      | SIGNATURE: _____                                                                                     | DATE: _____                 |
| NAME: _____                      | SIGNATURE: _____                                                                                     | DATE: _____                 |

**NAME AND SIGNATURE OF WITNESSES**

|                               |                                                                                                        |                             |
|-------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------|
| NAME: <u>Atsushi TOYOHARA</u> | SIGNATURE: <u></u> | DATE: <u>March 31, 2010</u> |
| NAME: <u>Akira MUTO</u>       | SIGNATURE: <u></u> | DATE: <u>March 31, 2010</u> |

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