

PATENT ASSIGNMENT

Electronic Version v1.1

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| 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>Kyle K. Kirby</td><td>10/13/2008</td></tr><tr><td>Kunal R. Parekh</td><td>10/15/2008</td></tr></tbody></table> |                                 | Name          | Execution Date | Kyle K. Kirby       | 10/13/2008 | Kunal R. Parekh | 10/15/2008 |
| Name  | Execution Date                  |               |                |                     |            |                 |            |
| Kyle K. Kirby   | 10/13/2008                      |               |                |                     |            |                 |            |
| Kunal R. Parekh   | 10/15/2008                      |               |                |                     |            |                 |            |
| RECEIVING PARTY DATA  |                                 |               |                |                     |            |                 |            |
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| City:   | Boise                           |               |                |                     |            |                 |            |
| State/Country:  | IDAHO                           |               |                |                     |            |                 |            |
| Postal Code:  | 83707-0006                      |               |                |                     |            |                 |            |
| 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>12253121</td></tr></tbody></table>  |                                 | Property Type | Number         | Application Number: | 12253121   |                 |            |
| Property Type   | Number                          |               |                |                     |            |                 |            |
| Application Number:   | 12253121                        |               |                |                     |            |                 |            |
| CORRESPONDENCE DATA   |                                 |               |                |                     |            |                 |            |
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| Correspondent Name:   | PERKINS COIE LLP PATENT-SEA     |               |                |                     |            |                 |            |
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| Address Line 2:   | Paul T. Parker                  |               |                |                     |            |                 |            |
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| ATTORNEY DOCKET NUMBER:   | 108298962US                     |               |                |                     |            |                 |            |
| NAME OF SUBMITTER:  | Paul T. Parker                  |               |                |                     |            |                 |            |
| Total Attachments: 3<br>source=Assignment#page1.tif<br>source=Assignment#page2.tif  |                                 |               |                |                     |            |                 |            |

OP \$40.00 12253121

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PATENT  
REEL: 021694 FRAME: 0679



## ASSIGNMENT BY INVENTORS

This Assignment is by Kyle K. Kirby and Kunal R. Parekh (the "Assignors"), residing at 2611 E. Margate Court, Eagle, Idaho 83616; and 677 N. Morningside Way, Boise, Idaho 83712, respectively. The Assignors have invented one or more certain inventions (the "Invention(s)") described in a Patent application for Letters Patent of the United States entitled SEMICONDUCTOR SUBSTRATES WITH UNITARY VIAS AND VIA TERMINALS, AND ASSOCIATED SYSTEMS AND METHODS (the "Application"), executed concurrently herewith and naming the Assignors as inventors.

Micron Technology, Inc., a Corporation of Delaware having its principal place of business at 8000 S. Federal Way, Boise, Idaho 83707-0006 ("Assignee"), desires to acquire the entire right, title and interest in and to the Invention(s) and the Application, and in and to any patents (collectively, "Patents") that may be granted for the Invention(s) in the United States or in any foreign countries.

For valuable consideration, the receipt and sufficiency of which Assignors acknowledge, Assignors hereby sell, assign, and transfer to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to: the Invention(s), the Application, and any Patents; any divisions, continuations, and continuations-in-part of the Application and any other application claiming priority rights from the Application; any reissues, reexaminations, or extensions of any and all Patents; the right to file foreign applications directly in the name of Assignee; and the right to claim priority rights deriving from the Application (collectively, the "Rights"). Assignors warrant that Assignors own the Rights, and that the Rights are unencumbered. Assignors also agree to not sign any writing or do any act conflicting with this assignment, and, without further compensation, sign all documents and do such additional acts as Assignee deems necessary or desirable to: perfect Assignee's enjoyment of the Rights; conduct proceedings regarding the Rights, including any litigation or interference proceedings; or perfect or defend title to the Rights. Assignors request the Commissioner of Patents to issue any Patent of the United States that may be issued on the Invention(s) to Assignee. This Assignment may be executed in counterparts.

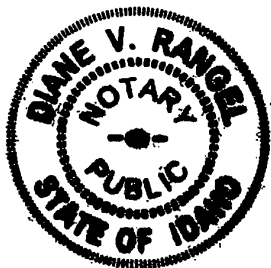
Kyle K. Kirby  
Kyle K. Kirby

Date: 10/13/08

United States of America )  
State of Idaho ) ss.:  
County of Ada )

On this 13<sup>th</sup> day of October, 2008, before me  
personally came Kyle K. Kirby, to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

Diane V. Rangel  
Notary Public

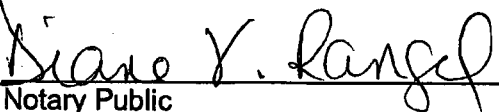


  
Kunal R. Parekh

Date: 10/15/2008

United States of America )  
State of Idaho ) ss.:  
County of ADA )

On this 15<sup>th</sup> day of October, 2008, before me  
personally came Kunal R. Parekh, to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

  
Notary Public

