

03-03-2000

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

Docket No.: 98-040

To the Honorable Commissioner of Patents and

If documents or copy thereof.

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<p>1. Name of conveying party(ies):</p> <p>Virginia Polytechnic Institute &amp; State University</p> <p>Additional names of conveying party(ies) attached?  <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p> <p>3. Nature of Conveyance</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger  <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name  <input type="checkbox"/> Other _____</p> <p>Execution Date: January 10, 2000</p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: VIRGINIA TECH INTELLECTUAL PROPERTIES</p> <p>Internal Address:</p> <p>Street Address: 1872 Pratt Drive, Suite 1625</p> <p>City: Blacksburg</p> <p>State: Virginia</p> <p>Zip Code: 24060</p> <p>Additional name(s) &amp; address(es) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p>
<p>4. Application number(s) or patent number(s):</p> <p>Title: A HIGH INPUT VOLTAGE, HIGH EFFICIENCY, FAST TRANSIENT VOLTAGE REGULATOR MODULE (VRM)</p> <p>If this document is being filed together with a new application, the execution date of the application is _____</p> <p>A. Patent Application No(s). 09/434,514 filed November 5, 1999</p> <p>B. Patent No(s).</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Kevin A. Reif, Esq.  Whitham, Curtis &amp; Whitham  Reston International Center  11800 Sunrise Valley Drive  Suite 900  Reston, Virginia 20191</p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41): <u>\$ 40.00</u></p> <p><input checked="" type="checkbox"/> Enclosed</p> <p><input checked="" type="checkbox"/> Authorized to be charged to deposit account  <input type="checkbox"/> Total fee due  <input checked="" type="checkbox"/> Any deficiencies in the enclosed fees</p> <p>8. Deposit account number:  23-1951</p>
<p>9. Statement and signature</p> <p>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.</p> <p><u>Kevin A. Reif</u>  Name of Person Signing</p> <p><u>Kevin A. Reif</u>  Signature</p> <p><u>2/2/00</u>  Date</p> <p>Total number of pages including cover sheet: <u>3</u></p>	

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**ASSIGNMENT**

**WHEREAS**, Virginia Polytechnic Institute and State University, (hereinafter referred to as ASSIGNOR), an institute of higher education organized under the laws of the Commonwealth of Virginia, having an office and principal place of business at Blacksburg, Virginia, is the owner of the entire right, title and interest in and to application for United States Letters Patent Serial No. 09/434,514 , filed on November 11, 1999 in the names of Xunwei Zhou and Fred C. Lee for A HIGH INPUT VOLTAGE, HIGH EFFICIENCY, FAST TRANSIENT VOLTAGE REGULATOR MODULE (VRM) and of the invention therein described; and

**WHEREAS**, Virginia Tech Intellectual Properties, Inc. (hereinafter referred to as ASSIGNEE), a non-stock corporation organized under the laws of the Commonwealth of Virginia and having a principal place of business at 1872 Pratt Drive, Suite 1625, Blacksburg, VA 24060, is desirous of acquiring the entire right, title and interest in, to and under said application and said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

**NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:** Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt and sufficiency of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE, its lawful successors and assigns, the full and exclusive right, title and interest to said invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, continuation-in-part, reexamination, renewal, substitute, extension or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted; and authorize and request the Commissioner of Patents of the United States and any official of any foreign country whose duty it is to issue patents or legal equivalents thereto, to issue same for this invention to ASSIGNEE, its lawful successors and assigns.

**ASSIGNOR** hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

**ASSIGNOR** further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to ASSIGNOR and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof in any foreign country which may be necessary or desirable to carry out the purposes thereof.

**PATENT****REEL: 010577 FRAME: 0766**

IN WITNESS WHEREOF, ASSIGNOR has caused the hand of its proper office  
to be subscribed hereto this 10 day of January, ~~1999~~ 2000

Witnessed by:

VIRGINIA POLYTECHNIC INSTITUTE  
AND STATE UNIVERSITY

By: William E. Richmond