

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>Robert Gardner</td><td>01/04/2007</td></tr><tr><td>Yilu Liu</td><td>12/19/2006</td></tr><tr><td>Zhian Zhong</td><td>01/03/2007</td></tr></tbody></table>		Name	Execution Date	Robert Gardner	01/04/2007	Yilu Liu	12/19/2006	Zhian Zhong	01/03/2007		
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Yilu Liu	12/19/2006										
Zhian Zhong	01/03/2007										
RECEIVING PARTY DATA											
<table border="1"><tr><td>Name:</td><td>Virginia Polytechnic Institute and State University</td></tr><tr><td>Street Address:</td><td>301 Burruss Hall</td></tr><tr><td>City:</td><td>Blacksburg</td></tr><tr><td>State/Country:</td><td>VIRGINIA</td></tr><tr><td>Postal Code:</td><td>24061</td></tr></table>		Name:	Virginia Polytechnic Institute and State University	Street Address:	301 Burruss Hall	City:	Blacksburg	State/Country:	VIRGINIA	Postal Code:	24061
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PROPERTY NUMBERS Total: 1											
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Application Number:	12363049										
CORRESPONDENCE DATA											
Fax Number: (540)951-5292 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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ATTORNEY DOCKET NUMBER:	VTIP 05.057 DIV										
NAME OF SUBMITTER:	Naomi Lewis										
Total Attachments: 3 source=05.057 Assign Inv to VT#page1.tif source=05.057 Assign Inv to VT#page2.tif											

OP \$40.00 12363049

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PATENT
REEL: 022400 FRAME: 0180

VTIP 05.057

Serial Number: 11/588,247

ASSIGNMENT

WHEREAS, I/we, the below-named inventor(s) (hereinafter referred to as ASSIGNORS) whose residence address is stated below, have invented certain new and useful improvements in an invention entitled:

Location Determination of Power System Disturbances Based on Frequency Responses of the System

for which an application for United States Letters Patent Serial No. 11/588,247 has been filed on October 27, 2006; and

WHEREAS, Virginia Polytechnic Institute and State University, (hereinafter referred to as ASSIGNEE), an institute of higher education organized under the laws of the Commonwealth of Virginia, having an office and principal place of business at 301 Burruss Hall, Blacksburg, Virginia, 24061, 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 therefore in the United States and in any and all foreign countries.

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer 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 and any non-provisional applications claiming the benefit of said application 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.

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

ASSIGNORS further covenant 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 ASSIGNORS 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, enforce and defend 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.

VTIP 05.057

Serial Number: 11/588,247

Full name of inventor: Robert Gardner

Residence: 904 Brightwood Manor Drive, Apt 9, Blacksburg, VA 24060

Signature: [Signature] Date: 1/4/07

State of Virginia
County of Montgomery

On Jan 4, 2007 I do hereby certify that Robert Gardner
personally appeared and acknowledged the due execution of the foregoing instrument.

Debra S. Jones

Notary Public

My Commission Expires: December 31, 2007

Full name of inventor: Yilu Liu

Residence: 302 Seminole Drive, Blacksburg, VA 24060

Signature: [Signature] Date: 12/19/06

State of Virginia
County of Montgomery

On December 19th, 2006, 2006 I do hereby certify that Yilu Liu
personally appeared and acknowledged the due execution of the foregoing instrument.

Heather Smith

Notary Public

My Commission Expires: 7-31-08

VTIP 05.057

Serial Number: 11/588,247

Full name of inventor: Zhian Zhong

Residence: 7408 Steeplecrest Cir., #200, Louisville, Kentucky 40207

Signature: [Signature] Date: 1/2/2007

State of KENTUCKY
County of JEFFERSON

On 3rd DAY OF JAN 2007 I do hereby certify that ZHIAN ZHONG
personally appeared and acknowledged the due execution of the foregoing instrument.

[Signature]
Notary Public JUN 1 2 2010

My Commission Expires: _____