

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Jian Li	11/20/2006
Dong Sam Ha	11/20/2006
Yang Qiu	11/20/2006
Ming Xu	12/07/2006
Fred C. Lee	12/07/2006
RECEIVING PARTY DATA	
Name:	Virginia Polytechnic Institute and State University
Street Address:	301 Burruss Hall
City:	Blacksburg
State/Country:	VIRGINIA
Postal Code:	24061
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	11561104
CORRESPONDENCE DATA	
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<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
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Email:	linda@wcc-ip.com
Correspondent Name:	Whitham, Curtis, Christofferson & Cook
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ATTORNEY DOCKET NUMBER:	01640567AA
NAME OF SUBMITTER:	Michael E. Whitham

CH \$40.00 11561104

Total Attachments: 4

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VTIP 06.012
Serial Number: 11/561,104

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:

Hybrid Control Methods for Digital Pulse Width Modulator (DPWM)

for which an application for United States Letters Patent Serial No. 11/561,104 has been filed on November 17, 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 06.012

Serial Number: 11/561,104

Full name of inventor: Yang Qiu

Residence: 300 Houndschase Lane, Apt. K, Blacksburg, Virginia 24060

Signature: _____ Date: _____

State of _____
County of _____

On _____, 2006 I do hereby certify that _____
personally appeared and acknowledged the due execution of the foregoing instrument.

Notary Public

My Commission Expires: _____

Full name of inventor: Ming Xu

Residence: 2010 Northside Drive, Blacksburg, Virginia 24060

Signature: [Signature] Date: 12-7-06

State of VIRGINIA
County of MONTGOMERY

On DECEMBER 7, 2006 I do hereby certify that MING XU
personally appeared and acknowledged the due execution of the foregoing instrument.

[Signature]
Notary Public

My Commission Expires: 9-30-2010

Full name of inventor: Fred Lee

Residence: 2909 Stradford Lane, Blacksburg, Virginia 24060

Signature: [Signature] Date: 12-7-06

State of VIRGINIA
County of MONTGOMERY

On DECEMBER 7, 2006 I do hereby certify that FRED C. LEE
personally appeared and acknowledged the due execution of the foregoing instrument.

[Signature]
Notary Public

My Commission Expires: 9-30-2010

VTIP 06.012
Serial Number: 11/561,104

Full name of inventor: Jian Li
Residence: 626 Lee Street, Blacksburg, Virginia 24060

Signature: Jian Li Date: 11/20/06

State of Virginia
County of Montgomery

On 2 November 20, 2006 I do hereby certify that Jian Li
personally appeared and acknowledged the due execution of the foregoing instrument.

Kennedy K Medley
Notary Public
My Commission Expires: 5/31/10

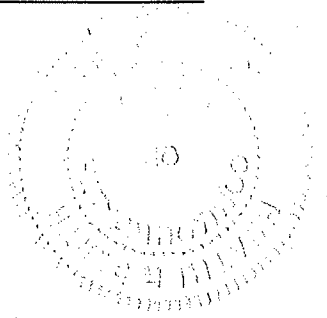
Full name of inventor: Dong Sam Ha
Residence: 407 Seminole Drive, Blacksburg, Virginia 24060

Signature: Dong Sam Ha Date: Nov. 20, 2006

State of Virginia
County of Montgomery

On November 20th 2006, 2006 I do hereby certify that Dong Sam Ha
personally appeared and acknowledged the due execution of the foregoing instrument.

Heath Smith
Notary Public
My Commission Expires: 7-31-08



VTIP 06.012
Serial Number: 11/561,104

Full name of inventor: Yang Qiu
Residence: 300 Houndschase Lane, Apt. K, Blacksburg, Virginia 24060

Signature: [Signature] Date: 11/20/2006

State of Virginia
County of Montgomery

On November 20, 2006 I do hereby certify that Yang Qiu
personally appeared and acknowledged the due execution of the foregoing instrument.

[Signature]
Notary Public

My Commission Expires: 5/31/10

Full name of inventor: Ming Xu
Residence: 2010 Northside Drive, Blacksburg, Virginia 24060

Signature: [Signature] Date: 11/21/06

State of Virginia
County of Montgomery

On _____, 2006 I do hereby certify that Ming Xu
personally appeared and acknowledged the due execution of the foregoing instrument.

Notary Public

My Commission Expires: _____

Full name of inventor: Fred Lee
Residence: 2909 Stradford Lane, Blacksburg, Virginia 24060

Signature: [Signature] Date: _____

State of _____
County of _____

On _____, 2006 I do hereby certify that _____
personally appeared and acknowledged the due execution of the foregoing instrument.

Notary Public

My Commission Expires: _____