

RECORDATION FORM COVER SHEET
PATENTS ONLY - ABDT-0582/B030080

To The Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Karen J. Smiley **12/4/2003**
 First Assignor Date of Execution

Thomas E. Long **11/26/2003**
 Second Assignor Date of Execution

David N. Cox **11/24/2003**
 Third Assignor Date of Execution

Fourth Assignor Date of Execution

Fifth Assignor Date of Execution

Sixth Assignor Date of Execution

Additional name(s) of conveying party(ies) attached? YES NO

2. Name and address of receiving party(ies)

Name: **ABB INC.**

Street Address: **Centennial Campus -NCSU**
1021 Main Campus Drive

City: **Raleigh**

State **North Carolina** ZIP **27606**

Additional name(s) & address attached? YES NO

3. Nature of Conveyance (check only one):

New Assignment Merger
 License Agreement Security Agreement
 Change of Name Other:

4. Identification of Application number(s), patent number(s) OR date of execution of application to which assignment refers:

Apphcanon Nos.:	Patent Nos.:	Date application was signed by the first named executing inventor
10/699,468		

(Fill-in this date only if assignment is filed together with a new application)

5. Name and address of party to whom correspondence concerning documents should be mailed:

Name: **Frank T. Carroll, Esq.**
WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, Pennsylvania 19103-7301
215-568-3100

6. Total number of applications and patents involved: **1**

7. Total fee (37 CFR 3.41): **\$40.00**

Enclosed
 Authorized to be charged to Deposit Account Number 23-3050

8. Please charge any deficiency or credit any overpayment to Deposit Account Number 23-3050

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9. Statement and signature.
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.

Frank T. Carroll/Reg. No. 42,392 *Frank T. Carroll* **March 11, 2004**
 Name of Person Signing/Reg. No Signature Date

Total number of pages including cover sheet, assignment document and additional pages attached thereto: **5**

Mail documents to be recorded with required cover sheet information to

Mail Stop Assignment Recordation Services
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

CH \$40.00 233050 10699468

DOCKET NO.: ABDT-0582/B030080**PATENT
Joint Inventors****(Pending Application;
Serial No. Known)****ASSIGNMENT**

WHEREAS, we **Karen J. Smiley, Thomas E. Long, David N. Cox**, hereinafter referred to as the assignors, residing respectively at **4515 Johns Court, Benson, North Carolina 27504; 1500 River Mill Drive, Unit 301, Wake Forest, North Carolina 27587; 4508 Wellington Down, Raleigh, North Carolina 27613** are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Serial No. **10/699,468**, filed **October 31, 2003**, entitled **METHOD FOR EVALUATING A TRANSFORMER DESIGN**; and

WHEREAS, **ABB INC.**, hereinafter referred to as the assignee, of **Centennial Campus - NCSU, 1021 Main Campus Drive, Raleigh, North Carolina 27606**, a corporation of **Delaware**, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of our employment by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said