ABMS-0154/B010360 To The Honorable Commissioner of Patents and Trademarks. 735617 original documents or copy thereof. 1. Name of conveying party(ies): NPP 3-5-02 2. Name and address of receiving party(ies): January 24, 2002 Name: ABB INC. Yi Hu First Assignor Date of Execution Street Address: Centennial Campus January 31, 2002 1021 Main Campus Drive William M. Egolf Date of Execution Second Assignor City: Raleigh February 4, 2002 David G. Hart State North Carolina ZIP 27606 Date of Execution Third Assignor Additional name(s) & address attached? ()YES (x)NO Luciano DiMaio February 11, 2002 3. Nature of Conveyance (check only one): Date of Execution Fourth Assignor (x) New Assignment February 11, 2002 Fabio Gatelli () Merger () License Agreement Fifth Assignor Date of Execution () Security Agreement () Change of Name () Other: ()Cross-reference of Assignment filed in United States Date of Execution Sixth Assignor Application No._/__, recorded on____ at Reel No. ____and Frame No.____ Additional name(s) of conveying party(ies) attached?-- () YES (x) NO 4. Identification of Application number(s), patent number(s) OR data of execution of application to which assignment refers: Patent Nos.: Date application was signed by the first Application Nos.: 10/034,063 named executing inventor MAR - 5 2002 (Fill-in this date only if assignment is filed together with a new application) 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning documents should be mailed: Name: Steven B. Samuels 7. Total fee (37 CFR 3.41):.....\$40.00 WOODCOCK WASHBURN LLP () Enclosed () Authorized to be charged to Deposit Account One Liberty Place - 46th Floor Philadelphia, Pennsylvania 19103-7301 Number 23-3050 215-568-3100 B/14/2002 TDIAZ1 00000168 10034063 8. Please charge any deficiency or credit any overpayment to Deposit Account Number 23-3050 40.00 DP FQ:581 DO NOT USE THIS SPACE To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of 9. Statement and signature. the original document. Steven B. Samuels/Reg. No. 37,711 Date Name of Person Signing/Reg. No. Total number of pages including cover sheet, assignment document and additional pages attached thereto: Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231

> PATENT REEL: 012853 FRAME: 0156

DOCKET NO.: ABMS-0154/B010360

PATENT Joint Inventors

(Pending Application; Serial No. Known)

ASSIGNMENT

WHEREAS, we Yi Hu; Luciano DiMaio; Fabio Gatelli; William M. Egolf; David G. Hart, hereinafter referred to as the assignors, residing respectively at 300 Fairfax Lane, Cary, North Carolina 27513; Via G. Arganini, 10, Milano 20162 Italy; Via Montirone 40, 25021 Bagnolo Mella (Bs), Italy; 1702 Walden Meadow Drive, Apex, North Carolina 27502; 2726 Blaydon Drive, Raleigh, North Carolina 27606 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. 10/034,063, filed December 26, 2001, entitled SYSTEM AND METHOD FOR COORDINATED CONTROL OF A SWITCHED POWER CAPACITOR WITH AN INTEGRATED RESONANCE PROTECTION SYSTEM; 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

PATENT REEL: 012853 FRAME: 0157 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 assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

AND this Assignment may be executed in multiple counterparts, each of which shall be deemed to be an original of this Assignment. Additionally, we hereby authorize our attorneys to collect the signature pages of each executed counterpart and to attach those signature pages to a single copy of this instrument, which single copy and attached signature pages together shall constitute an original of this Assignment.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

Jan. 24, 2002_	YI HU (L.S.)
STATE OF <u>North Carolina</u> COUNTY OF <u>Wake</u>	<u></u> : : ss :
On this $\frac{24^{+}}{}$ day of _ before me personally came the above name	Tanuary, year of 2002, led Yi Hu to me personally known and who executed the foregoing assignment, and who same was of that person's own free will for the use
	Have P. Warren Notary Public

MY COMMISSION EXPIRES MARCH 28, 2005.

- 2 -

PATENT Joint Inventors

/31/02	WILLIAM M.	EGOLE	(L.S.)
STATE OF North Carolina COUNTY OF Wake	:		
\\\ \land \land \ka	: SS		
COUNTY OF Wake	· · · · · · · · · · · · · · · · · · ·		
On this <u>3/3+</u> day of before me personally came the above name known to me to be the same individual vacknowledged to me that execution of the sand purposes therein set forth.	d William M. E	Egolf to me per e foregoing ass	signment, and who
	Notary Pub		

MY COMMISSION EXPIRES MARCH 28, 2005.

Stephanie Inammell Braswell Notary Public My Commission Expires: September 17,2003

<u> 11/02/2002</u> Date	LUC	TIANO DIMAIO	ر(L.S.)
	200	DIVIAIO	
STATEMENT OF WITNESS			
SIGNED at DALKINE) ITALY (Country)
This 11 day of Febru	<u>ary</u>	, 200 <u>2</u> .	
I, <u>CALLISTO</u>	GATTI		whose full
Print Name of V			
residence address is VIA CANTUL	10 N. 15	YRBIND (BG)	ITALY
Print Address of	Witness		
was personally present and did see 11 day of FEBRUARY me to be the person described in such	Luciano DiN , 200 2 ch document.	<u>faio</u> execute the a , and such assignor	bove assignment on the is personally known to
		Collina	<i>.</i>
	Signat	ure of Witness	

RECORDED: 03/05/2002

11/02/2002 Date	FABIO GATELLI (L.S	.)
STATEMENT OF WITNESS		
SIGNED at DALMINE (BEF	(Country)	
This 11 day of Holmony	, 200 <u>&</u> .	
I, <u>こ人しいらてつ GAT</u> Print Name of Witness		
residence address is ULA CANTULLO Print Address of Witness		
was personally present and did see Fabruary me to be the person described in such doc	io Gatelli execute the above assignment on to 200 2, and such assignor is personally known ument.	he to
	Signature of Witness	

PATENT REEL: 012853 FRAME: 0162