Substitute for Form PTO-1595 **Recordation Form Cover Sheet PATENTS ONLY**

Attorney's Docket No. 1004501-000986

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

CO	RRECTIVE				
1.	Name of conveying party(ies): Leonardo SERPA Johann Walter KOLAR Simon Douglas ROUND				
2.	Name and address of receiving party(ies): ABB Schweiz AG Brown Boveri Strasse 6 CH-5400 Baden, Switzerland				
3.	Nature of Conveyance/Execution Date(s): Execution Date(s): February 5, 2009, February 10, 2009 and February 13, 2009, respectively				
	Assignment				
4.	Application or patent number(s): A. Patent Application No.(s) 12/153,514 B. Patent No.(s)				
	This document is being filed together with a new application.				
5.	Name and address to whom correspondence concerning document should be mailed: Name: Patrick C. Keane Address: Buchanan Ingersoll & Rooney PC Customer Number 21839 P.O. Box 1404 Alexandria, VA 22313-1404				
6.	Total number of applications and patents involved: 1				
7.	Total fee (37 CFR 1.21(h) & 3.41) \$ 40 Authorized to be charged by credit card. PTO Form 2038 attached. Authorized to be charged to deposit account 02-4800 Enclosed. None required (gov't interest not affecting title)				
8.	Signature: 32858 Feb 25, 2009 Signature Reg. No. Date				
	Patrick C. Keane Name of Person Signing Total number of pages including cover sheet, attachments, and documents: 5				

05/075-US-PCT

Attorney Docket No 1004501-000986

ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by (1) Leonardo SERPA, (2) Johann Walter KOLAR, and (3) Simon Douglas ROUND, residing at (1) Zürich, Switzerland; (2) Zürich, Switzerland; and (3) Zürich, Switzerland (hereinafter referred to as "the Assignors"), respectively, witnesseth:

METHOD set forth in an application for Letters Patent of the United States, which is a (1) provisional application (a) 🔲 bearing Application No. ______, and filed on ______; (b) \Box to be filed herewith; or (2)non-provisional application (a) 🔯 bearing Application No. 12/153,514, and filed on May 20, 2008; (b) having an eath or declaration executed on even date herewith prior to filing of application; (c) 🔲 having an oath or declaration executed on a different date than this

WHEREAS, the Assignors have invented certain new and useful improvements in METHOD FOR OPERATING A CONVERTER CIRCUIT, AND DEVICE FOR CARRYING OUT THE

WHEREAS, ABB SCHWEIZ AG, a corporation duly organized under and pursuant to the laws of Switzerland and having a principal place of business at Brown Boveri Strasse 6, CH-5400 Baden, Switzerland (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

Assignment: and

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignor has sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made:

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the Inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever

PATENT REEL: 022314 FRAME: 0755

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counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Buchanan Ingersoll & Rooney PC to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said invention, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

DATE 05.01 2009	x Leonardo Serpa
	LEONARDO SERPA
DATE	x
	JOHANN WALTER KOLAR
DATE	x
	SIMON DOLIGIAS ROUND

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DATE	X	
	LEONARDO SERPA	
DATE	X	
-	JOHANN WALTER KOLAR	
	/	
DATE 13 February 2009	· m	
3.00	SIMON DOUGLAS ROUND	

Buchanan Ingersoll & Rooney PC

RECORDED: 02/25/2009