PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Munaf RAHIMO	07/28/2011
Ulrich SCHLAPBACH	07/28/2011
Arnost KOPTA	07/28/2011

RECEIVING PARTY DATA

Name:	ABB TECHNOLOGY AG	
Street Address:	eet Address: Affolternstrasse 44	
City:	Zurich	
State/Country:	SWITZERLAND	
Postal Code:	CH-8050	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13160945

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 1004501-001192

NAME OF SUBMITTER: Patrick C. Keane

Total Attachments: 2

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PATENT

REEL: 026687 FRAME: 0497

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ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by (1) Munaf RAHIMO, (2) Ulrich SCHLAPBACH, and (3) Arnost KOPTA, residing at (1) Uezwil, Switzerland; (2) Liebefeld, Switzerland; and (3) Zürich, Switzerland (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>BIPOLAR PUNCH-THROUGH SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING SUCH A SEMICONDUCTOR DEVICE</u> 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)		to be filed herewith; or	
(2)	\boxtimes	non-p	rovisional application	
	(a)	\boxtimes	bearing Application No. <u>13/160,945</u> , and filed on <u>15 June 2011</u> ;	
	(b)		having an oath 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 Assignment: and	

WHEREAS, ABB TECHNOLOGY AG, a corporation duly organized under and pursuant to the laws of Switzerland and having a principal place of business at Affolternstrasse 44, CH-8050 Zürich, 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.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have 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;

Buchanan Ingersoll & Rooney PC
Attorneys & Government Relations Professionals

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Combined Declaration and Power of Attorney
For Utility or Design Patent Application
Application No. 13/160,945
Attorney Docket No. 1004501-001192
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I hereby appoint the attorneys and agents associated with the following PTO Customer Number of Buchanan Ingersoll & Rooney PC to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and transact all business in connection with international applications directed to said invention:

Customer Number 21839

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF SOLE OR FIRST INVENTOR	Munaf RAHIMO
Signature	7 17
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FULL NAME SECOND INVENTOR, IF ANY	Ulrich SCHLAPBACH
Signature	U. Schlagench
Date	2 8. Juli 2011
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FULL NAME THIRD INVENTOR, IF ANY	Arnost KOPTA
Signature	Arnost Kopta 28. Juli 2011
Date	2 8. Juli 2011
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Buchanan Ingersoll & Rooney PC Attorneys & Government Relations Professionals RECORDED: 08/02/2011

PATENT REEL: 026687 FRAME: 0499