

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5890004

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNEE NAME previously recorded on Reel 034729 Frame 0614. Assignor(s) hereby confirms the ASSIGNMENT.
CONVEYING PARTY DATA	
Name	Execution Date
MATS LARSSON	01/14/2015
STEFAN THORBURN	01/14/2015
BERTIL BERGGREN	12/23/2014
RECEIVING PARTY DATA	
Name:	ABB RESEARCH LTD
Street Address:	AFFOLTERNSTRASSE 44
City:	ZURICH
State/Country:	SWITZERLAND
Postal Code:	CH-8050
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14597922
CORRESPONDENCE DATA	
Fax Number:	(703)816-4100
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	703-816-4000
Email:	bnapear@nixonvan.com, PTOmail@nixonvan.com
Correspondent Name:	NIXON & VANDERHYE P.C.
Address Line 1:	901 NORTH GLEBE ROAD
Address Line 2:	11TH FLOOR
Address Line 4:	ARLINGTON, VIRGINIA 22203
ATTORNEY DOCKET NUMBER:	GPK-227-323
NAME OF SUBMITTER:	GORDON P. KLANCNIK
SIGNATURE:	/Gordon P. Klancnik/
DATE SIGNED:	12/31/2019
Total Attachments: 8	
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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3184992

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MATS LARSSON	01/14/2015
STEFAN THORBURN	01/14/2015
BERTIL BERGGREN	12/23/2014
RECEIVING PARTY DATA	
Name:	ABB RESEARH LTD <u>ABB RESEARCH LTD</u>
Street Address:	AFFOLTERNSTRASSE 44
City:	ZÜRICH
State/Country:	SWITZERLAND
Postal Code:	CH-8050
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14597922
CORRESPONDENCE DATA	
Fax Number:	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	7038366620
Email:	albina.torres-price@bipc.com
Correspondent Name:	BUCHANAN INGERSOLL & ROONEY
Address Line 1:	P.O. BOX 1404
Address Line 4:	ALEXANDRIA, VIRGINIA 22314-1404
ATTORNEY DOCKET NUMBER:	1004501-001416
NAME OF SUBMITTER:	ALBINA R. TORRES-PRICE
SIGNATURE:	/ARTorres-Price/
DATE SIGNED:	01/15/2015
This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 6	
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COMBINED DECLARATION AND ASSIGNMENT (JOINT)

As one of the below named inventors, I hereby declare that this Declaration is directed to:

- (1) U.S. application number or PCT application number _____ filed on _____, entitled MULTI TERMINAL HVDC CONTROL; or
- (2) the attached application entitled MULTI TERMINAL HVDC CONTROL.

DECLARATION

As one of the below named inventors, I further declare that:

The above-identified application was made or authorized to be made by me.

I believe that I am an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNMENT

THIS ASSIGNMENT, by the undersigned inventors (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements set forth in the application for Letters Patent of the United States identified above;

WHEREAS, ABB RESEARCH LTD., 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 does 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

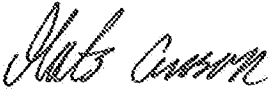
of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would 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 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 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 inventions, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

11 4 Jan. 2015

_____ Date	Mats LARSSON _____ Name	 _____ Signature
_____ Date	Stefan THORBURN _____ Name	_____ Signature
_____ Date	Bertil BERGGREN _____ Name	_____ Signature

COMBINED DECLARATION AND ASSIGNMENT (JOINT)

As one of the below named inventors, I hereby declare that this Declaration is directed to:

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I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

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WHEREAS, the Assignors have invented certain new and useful improvements set forth in the application for Letters Patent of the United States identified above;

WHEREAS, ABB RESEARCH LTD., 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 does 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 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 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 inventions, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

_____	Mats LARSSON	_____
Date	Name	Signature
4. Jan. 2015		
_____	Stefan THORBURN	_____
Date	Name	Signature
_____	Bertil BERGGREN	_____
Date	Name	Signature

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_____	Mats LARSSON	_____
Date	Name	Signature
_____	Stefan THORBURN	_____
Date	Name	Signature
2014-12-23	Bertil BERGGREN	
Date	Name	Signature