

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT5826438

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HENRIK F. BERNHEIM	06/09/2015
JERRITT H. HANSELL	06/09/2015
MARCIA REID MARTIN	06/11/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ASTROLINK INTERNATIONAL LLC
<b>Street Address:</b>	6801 ROCKLEDGE DRIVE
<b>City:</b>	BETHESDA
<b>State/Country:</b>	MARYLAND
<b>Postal Code:</b>	20817
<b>Name:</b>	DOMINION ENERGY TECHNOLOGIES, INC.
<b>Street Address:</b>	120 TREDEGAR STREET
<b>City:</b>	RICHMOND
<b>State/Country:</b>	VIRGINIA
<b>Postal Code:</b>	23219
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15934499
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(877)812-1249
<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>	
<b>Phone:</b>	9192382315
<b>Email:</b>	jjimerson@wt-ip.com
<b>Correspondent Name:</b>	LOCKHEED MARTIN CORP. AND WITHROW & TERRANOVA
<b>Address Line 1:</b>	106 PINEDALE SPRINGS WAY
<b>Address Line 4:</b>	CARY, NORTH CAROLINA 27511
<b>ATTORNEY DOCKET NUMBER:</b>	1302-401C/MC-03967CON
<b>NAME OF SUBMITTER:</b>	JOHN M. JIMERSON
<b>SIGNATURE:</b>	/John M. Jimerson/

<b>DATE SIGNED:</b>	11/18/2019
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**Total Attachments: 7**

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## ASSIGNMENT

THIS ASSIGNMENT, made by Henrik F. Bernheim, of Denver, CO, Jerritt H. Hansell of Boulder, CO, and Marcia Reid Martin of Longmont, CO (hereinafter referred to as Assignors);

WHEREAS, Assignors have invented certain new and useful inventions entitled SYSTEM AND METHOD FOR DETECTING AND LOCALIZING NON-TECHINICAL LOSSES IN AN ELECTRICAL POWER DISTRIBUTION GRID, set forth in an application for Letters Patent of the United States, already filed on June 13, 2014 as U.S. Nonprovisional Patent Application No. 14/304,035, and;

WHEREAS, Astrolink International LLC, a corporation organized under and pursuant to the laws of Delaware, having its principal place of business at 6801 Rockledge Drive, Bethesda, MD, 20817, USA, and Dominion Energy Technologies, Inc., a corporation organized under and pursuant to the laws of Virginia, having its principal place of business at 120 Tredegar Street, Richmond, VA, 23219, USA (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions, and improvements thereon, and in and to said applications for Letters Patent of the United States, and any Letters Patent of the United States, and of foreign jurisdictions, to be obtained therefor and thereon, as well as the right of action and all other rights, including the right to sue or otherwise bring action and to collect and receive damages therefrom for past infringement thereof, and to collection of reasonable royalties based on provisional rights thereof;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) in hand paid, and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents does sell,

assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and said improvements and said applications for Letters Patent, and in and to any and all patent applications claiming priority therefrom including, but not limited to, all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said inventions and improvements in any foreign country including, but not limited to, all divisions, continuations, continuations-in-part thereof, and further including, but not limited to, extensions, renewals, substitutes and reissues granted for said inventions and improvements in any foreign country, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which such Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made;

AND for the same consideration, Assignors hereby sell, assign, transfer and set over to Assignee, any and all claims and demands that Assignors may have against any person or entity relating to the right, title and interest in and to said inventions and improvements thereon, and said application for Letters Patent of the United States, and any Letters Patent of the United States, and of foreign jurisdictions, or other rights to be obtained therefor and thereon, including but not limited to, any claim of infringement of

rights, including provisional rights, whether heretofore or hereafter accrued, together with the right to retain for Assignee any and all sums that Assignee may obtain or recover as a result of the assertion or enforcement of any such claim or demand;

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owner of the entire right, title and interest in and to the said inventions and improvements thereon, and said application for Letters Patent above-mentioned, and any Letters Patent of the United States and of any foreign jurisdiction to be obtained therefor and thereon, and that the same are unencumbered, and that Assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth;

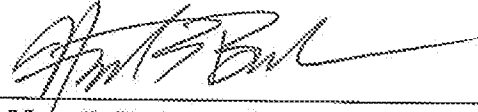
AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths, disclose all information material to patentability, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue,

reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable;

AND for the same consideration, Assignors hereby authorize and request the United States Commissioner for Patents, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to Assignee, for the sole use and benefit of Assignee, its successors, legal representatives and assigns;

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Henrik F. Bernheim, an Individual

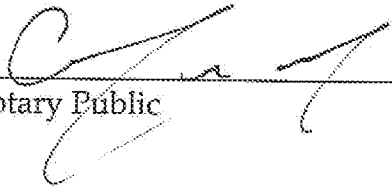


Henrik F. Bernheim

Date: 06/09/2015

United States of America )  
State of Colorado ) ss.:  
County of Boulder )

On this 9<sup>th</sup> day of June, 2015, before me personally came Henrik F. Bernheim, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

  
Notary Public

Christina M Molina  
Notary Public  
State of Colorado  
Notary ID 20124057986  
My Commission Expires September 05, 2016

Jerritt H. Hansell, an Individual

Jerritt H. Hansell  
Jerritt H. Hansell

Date: 06/09/2015

United States of America )  
State of Colorado ) ss.:  
County of Boulder )

On this 9<sup>th</sup> day of JUNE, 2015, before me personally came Jerritt H. Hansell, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Christina M. Molina  
Notary Public

Christina M Molina  
Notary Public  
State of Colorado  
Notary ID 20124057986  
My Commission Expires September 05, 2016



Marcia Reid Martin, an Individual

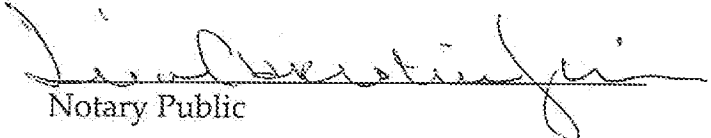


Marcia Reid Martin

Date: June 11, 2015

United States of America )  
State of Colorado ) ss.:  
County of Denver )

On this 11<sup>th</sup> day of June, 2015, before me personally came Marcia Reid Martin, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

  
Notary Public

LISA CHRISTINE JAMES  
NOTARY PUBLIC  
STATE OF COLORADO  
NOTARY ID 20104050389  
MY COMMISSION EXPIRES 11/16/2018