

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Christopher Goodman Ranson</td> <td>06/27/2013</td> </tr> <tr> <td>Gregory Allan Maca</td> <td>06/27/2013</td> </tr> <tr> <td>Thomas Kummetz</td> <td>07/01/2013</td> </tr> </tbody> </table>		Name	Execution Date	Christopher Goodman Ranson	06/27/2013	Gregory Allan Maca	06/27/2013	Thomas Kummetz	07/01/2013		
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>ANDREW LLC</td> </tr> <tr> <td>Street Address:</td> <td>1100 CommScope Place, S.E.</td> </tr> <tr> <td>City:</td> <td>Hickory</td> </tr> <tr> <td>State/Country:</td> <td>NORTH CAROLINA</td> </tr> <tr> <td>Postal Code:</td> <td>28602</td> </tr> </table>		Name:	ANDREW LLC	Street Address:	1100 CommScope Place, S.E.	City:	Hickory	State/Country:	NORTH CAROLINA	Postal Code:	28602
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PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13929081</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13929081						
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CORRESPONDENCE DATA											
<p>Fax Number: 4045413452  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 404 815 6500        Email: acumings@kilpatricktownsend.com        Correspondent Name: Kilpatrick Townsend &amp; Stockton LLP        Address Line 1: 1100 Peachtree Street, Suite 2800        Address Line 4: Atlanta, GEORGIA 30309</p>											
ATTORNEY DOCKET NUMBER:	62508-866254 (2387US)										
NAME OF SUBMITTER:	Andrea Cummings										
Signature:	/Andrea Cummings/										
Date:	07/01/2013										

OP \$40.00 13929081

Total Attachments: 5

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## ASSIGNMENT

We, the undersigned, have invented certain inventions and improvements disclosed in the non-provisional utility patent application entitled

“CANCELING NARROWBAND INTERFERING SIGNALS IN A DISTRIBUTED ANTENNA SYSTEM,”

filed with the United States Patent and Trademark Office on June 27, 2013

and assigned serial no. 13/929,081.

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we acknowledge, we:

1. Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to ANDREW LLC, a limited liability company of the State of North Carolina having a principal place of business at 1100 CommScope Place, S.E., Hickory, North Carolina 28602 (“Assignee”), the entire right, title, and interest in and to:
  - (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
  - (b) the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
  - (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and

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- (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.
2. Authorize and request the United States Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
  3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
  4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us, as well as our heirs, legal representatives, and assigns.
  5. Promise and affirm that we have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
  6. Authorize Kilpatrick Townsend & Stockton to insert above the application number and filing date of the above-described patent application if said information is not available at the time of the execution of this Assignment.

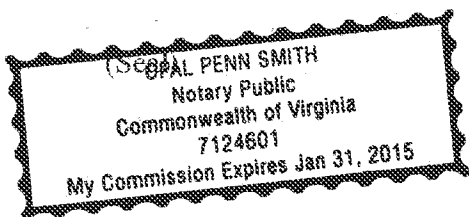
Signed on the date indicated beside my signature.

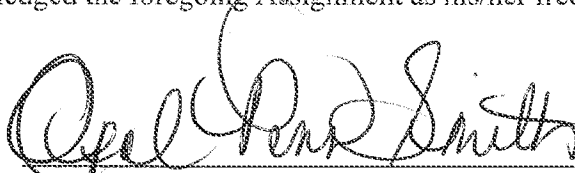
Signature:   
**CHRISTOPHER GOODMAN RANSON**

Date: June 27 2013

STATE OF Virginia  
COUNTY OF Bellford

Before me, a Notary Public in and for the State of Virginia, on this 27<sup>th</sup> day of June, 20 13, personally appeared **CHRISTOPHER GOODMAN RANSON**, who being duly sworn, signed and acknowledged the foregoing Assignment as his/her free act and deed.



  
NOTARY PUBLIC

My Commission Expires:

January 31, 2015

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U.S. Serial No. 13/929,081

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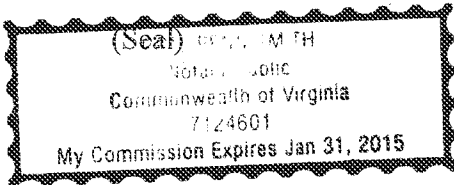
Signed on the date indicated beside my signature.

Signature: *Gregory A. Maca*  
GREGORY ALLAN MACA

Date: 6-27-2013

STATE OF Virginia  
COUNTY OF Bedford

Before me, a Notary Public in and for the State of Virginia, on this 27<sup>th</sup> day of June, 2013, personally appeared GREGORY ALLAN MACA, who being duly sworn, signed and acknowledged the foregoing Assignment as his/her free act and deed.



*Carol Ann Smith*  
NOTARY PUBLIC

My Commission Expires:

January 31, 2015

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U.S. Serial No. 13/929,081

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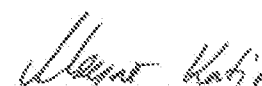
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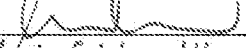
Signed on the date indicated beside my signature.

Signature:   
THOMAS KUMMETZ

Date: 1-24-12

Witnesses:

1. Signed:   
Printed Name: Meyer Katja  
Address: Industriestra 10  
86635 Zuchdorf

2. Signed:   
Printed Name: Leinfelder Ute  
Address: Wiesbrunnenstr. 2  
86653 Monheim