

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>Paul D. Franzon</td> <td>06/11/2012</td> </tr> <tr> <td>Peter Gadfort</td> <td>06/08/2012</td> </tr> <tr> <td>Wallace Shepherd Pitts</td> <td>06/07/2012</td> </tr> </tbody> </table> | | Name | Execution Date | Paul D. Franzon | 06/11/2012 | Peter Gadfort | 06/08/2012 | Wallace Shepherd Pitts | 06/07/2012 |
| Name | Execution Date | | | | | | | | |
| Paul D. Franzon | 06/11/2012 | | | | | | | | |
| Peter Gadfort | 06/08/2012 | | | | | | | | |
| Wallace Shepherd Pitts | 06/07/2012 | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | |
| Name: | North Carolina State University | | | | | | | | |
| Street Address: | 1021 Main Campus Drive | | | | | | | | |
| Internal Address: | Campus Box 8210 | | | | | | | | |
| City: | Raleigh | | | | | | | | |
| State/Country: | NORTH CAROLINA | | | | | | | | |
| Postal Code: | 27695 | | | | | | | | |
| 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>13481928</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13481928 | | | | |
| Property Type | Number | | | | | | | | |
| Application Number: | 13481928 | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | |
| Fax Number: | (919)419-0383 | | | | | | | | |
| Phone: | 9194938000 | | | | | | | | |
| Email: | sanderson@jwth.com | | | | | | | | |
| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i> | | | | | | | | | |
| Correspondent Name: | Gregory A. Hunt | | | | | | | | |
| Address Line 1: | 3100 Tower Boulevard | | | | | | | | |
| Address Line 2: | Suite 1200 University Tower | | | | | | | | |
| Address Line 4: | Durham, NORTH CAROLINA 27707 | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 297/258 | | | | | | | | |
| NAME OF SUBMITTER: | Gregory A. Hunt | | | | | | | | |
| Total Attachments: 3 source=297_258_Assignment#page1.tif source=297_258_Assignment#page2.tif source=297_258_Assignment#page3.tif | | | | | | | | | |

OP \$40.00 13481928

PATENT

Atty. Docket No.: 297/258

ASSIGNMENT

WHEREAS, we, Paul D. Franzon of New Hill, North Carolina; Peter Gadfort of Raleigh, North Carolina; and Wallace Shepherd Pitts of Raleigh, North Carolina (hereinafter "Assignors"), have invented certain new and useful improvements in MILLIMETER SCALE THREE-DIMENSIONAL ANTENNA STRUCTURES AND METHODS FOR FABRICATING SAME (hereinafter "Invention") for which application for a U.S. Patent was made on May 28, 2012 as Serial No. 13/481,928 (hereinafter "Application").

AND, WHEREAS, North Carolina State University, a non-profit organization located at Raleigh, North Carolina (hereinafter "Assignee"), is desirous of acquiring an interest therein.

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors have sold and by these presents do hereby sell, assign, transfer and convey unto the Assignee, its successors and assigns, their entire right, title and interest in and to the Invention and Application, and in and to any and all foreign patent applications filed on the Invention, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with their right to claim the priority of the Application in all countries in accordance with the Paris Convention, the Patent Cooperation Treaty, or other agreement or national law under which priority can be claimed, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this Assignment and sale had not been made.

Assignors hereby request that said Letters Patent be issued in accordance with this Assignment.

Assignors further covenant and agree that, at the time of the execution and delivery of these presents, Assignors possess the unencumbered right and authority to make this Assignment.


Assignors further covenant and agree, and likewise bind their heirs, legal representatives and assigns, to promptly communicate to said Assignee or its representatives any facts known to them relating to the Invention, to testify in any interference or legal proceedings involving the Application or Invention, to execute any additional papers which may be requested to confirm the right of the Assignee, its representatives, successors and assigns to secure patent or similar protection for the Invention in all countries and to vest in the Assignee complete title to the Invention and Letters Patent, without further compensation, but at the expense of said Assignee, its successors, assigns and other legal representatives.

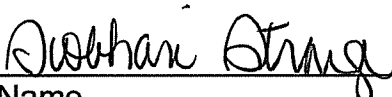
Executed this 11th day of June 2012.



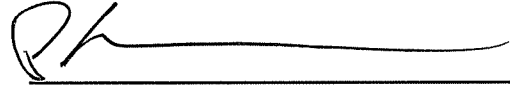
Paul D. Franzon

Witnessed by:

 Jun 11, 2012
Name Date

 6/11/2012
Name Date

Executed this 8 day of June 2012.



Peter Gadfort

Witnessed by:

Deborah Orange 6/8/2012
Name Date

Sam J. Pitts 6/8/2012
Name Date

Executed this 7 day of June 2012.


Wallace Shepherd Pitts

Witnessed by:

Deborah Orange 6/7/2012
Name Date

Steve Pitts 6/7/2012
Name Date
