

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3152100

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ROHIT BAHL	09/22/2012
NIKHIL GULATI	10/23/2012
KAPIL R. DANDEKAR	07/11/2012
DWIGHT L. JAGGARD	09/14/2012
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	DREXEL UNIVERSITY
<b>Street Address:</b>	3141 CHESTNUT STREET
<b>City:</b>	PHILADELPHIA
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	19104
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14408807
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(215)568-3439
<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>	215-568-3100
<b>Email:</b>	assignments@woodcock.com
<b>Correspondent Name:</b>	BAKER & HOSTETLER LLP
<b>Address Line 1:</b>	CIRA CENTRE 12TH FLOOR
<b>Address Line 2:</b>	2929 ARCH STREET
<b>Address Line 4:</b>	PHILADELPHIA, PENNSYLVANIA 19104-2891
<b>ATTORNEY DOCKET NUMBER:</b>	104889.000657 / 12-1429
<b>NAME OF SUBMITTER:</b>	VALERIE CHICCHI
<b>SIGNATURE:</b>	/Valerie Chicchi/
<b>DATE SIGNED:</b>	12/17/2014
<b>Total Attachments: 8</b>	
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source=SIGNED\_INVENTOR\_ASSIGNMENTS#page8.tif

**ASSIGNMENT**

WHEREAS, I, **Rohit Bahl**, a citizen of India, residing at **4005 Chestnut Street, Apt. 3, Philadelphia, Pennsylvania 19104**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0435 / 12-1429D** ("the invention"), assigned application number **61/662,109** filed **June 20, 2012**, which is entitled **RECONFIGURABLE ANTENNAS FOR PERFORMANCE ENHANCEMENT OF INTERFERENCE NETWORKS EMPLOYING INTERFERENCE ALIGNMENT** ("the subject application").

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, Pennsylvania 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

DOCKET NO.: DXU-0435 / 12-1429D

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 22nd day of September, year of 2012.

*Rohit Bahl*  
Signature – Rohit Bahl

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STATEMENT OF NOTARY PUBLIC

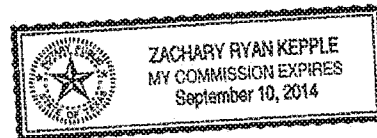
STATE OF Texas :

: SS

COUNTY OF Denton :

On this 22nd day of September, year of 2012, before me personally came the above named **Rohit Bahl** to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

*Zachary Ryan Kepple*  
Notary Public



ASSIGNMENT

WHEREAS, I, **Nikhil Gulati**, a citizen of **India**, residing at **2001 Hamilton Street, Apt. 621, Philadelphia, Pennsylvania 19130**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0435 / 12-1429D** ("the invention"), assigned application number **61/662,109** filed **June 20, 2012**, which is entitled **RECONFIGURABLE ANTENNAS FOR PERFORMANCE ENHANCEMENT OF INTERFERENCE NETWORKS EMPLOYING INTERFERENCE ALIGNMENT** ("the subject application").

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, Pennsylvania 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

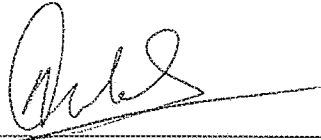
AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

DOCKET NO.: DXU-0435 / 12-1429D

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 23rd day of October, year of 2012.



Signature – Nikhil Gulati

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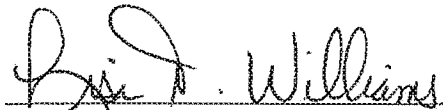
STATEMENT OF NOTARY PUBLIC

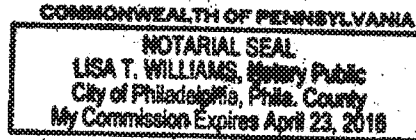
STATE OF Pennsylvania:

: SS

COUNTY OF Philadelphia:

On this 23 day of October, year of 2012, before me personally came the above named Nikhil Gulati to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

  
Notary Public



DOCKET NO.: DXU-0435 / 12-1429D

**ASSIGNMENT**

WHEREAS, I, **Kapil R. Dandekar**, a citizen of **United States**, residing at **1912 Pemberton Street, Philadelphia, Pennsylvania 19146**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0435 / 12-1429D** ("the invention"), assigned application number **61/662,109** filed **June 20, 2012**, which is entitled **RECONFIGURABLE ANTENNAS FOR PERFORMANCE ENHANCEMENT OF INTERFERENCE NETWORKS EMPLOYING INTERFERENCE ALIGNMENT** ("the subject application").

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, Pennsylvania 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

DOCKET NO.: DXU-0435 / 12-1429D

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 11<sup>TH</sup> day of July, year of 2012.

  
\_\_\_\_\_  
Signature – Kapil R. Dandekar

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**STATEMENT OF NOTARY PUBLIC**

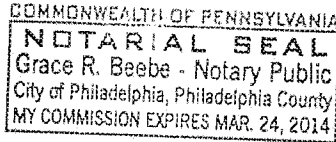
STATE OF Pennsylvania :

: SS

COUNTY OF Philadelphia :

On this 11<sup>th</sup> day of July, year of 2012, before me personally came the above named **Kapil R. Dandekar** to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

  
\_\_\_\_\_  
Notary Public





ASSIGNMENT

WHEREAS, I, **Dwight L. Jaggard**, a citizen of **United States**, residing at **308 Moore Building, 200 South 33<sup>rd</sup> Street, Philadelphia, Pennsylvania 19104**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0435 / 12-1429D** ("the invention"), assigned application number **61/662,109** filed **June 20, 2012**, which is entitled **RECONFIGURABLE ANTENNAS FOR PERFORMANCE ENHANCEMENT OF INTERFERENCE NETWORKS EMPLOYING INTERFERENCE ALIGNMENT** ("the subject application").

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, Pennsylvania 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

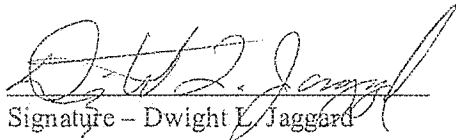
AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

DOCKET NO.: DXU-0435 / 12-1429D

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 14<sup>th</sup> day of September, year of 2012.

  
Signature - Dwight L. Jaggard

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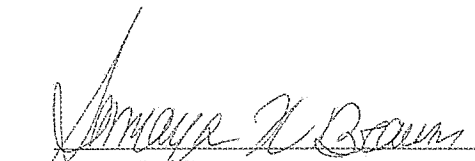
**STATEMENT OF NOTARY PUBLIC**

STATE OF PA \_\_\_\_\_:

: SS

COUNTY OF Montgomery \_\_\_\_\_:

On this 14 day of September, year of 2012, before me personally came the above named **Dwight L. Jaggard** to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

  
Notary Public

COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Natalie A. Cardwell, Notary Public  
Darby Boro, Delaware County  
My Commission Expires May 13, 2015  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES