# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2916123

SUBMISSION TYPE:		Ν	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		A	ASSIGNMENT			
CONVEYING PARTY	DATA					
			ame		Execution Date	
JOSEPH COSTANTINE					06/02/2014	
YOUSSEF ANTOINE TAWK					05/29/2014	
CHRISTOS G. CHRISTODOULOU					05/29/2014	
RECEIVING PARTY I	DATA					
Name:		EGENT	S OF THE UNIVERSITY		W MEXICO	
Street Address:		/ERSIT)	OF NEW MEXICO MSC	05 344	0	
City:		QUERQ				
State/Country:		/EXICO				
Postal Code:	87131					
PROPERTY NUMBE	RS Total: 1				1	
Property Type			Number			
PCT Number: US20		US2013	3032482			
CORRESPONDENCE	E DATA					
Fax Number:		(505)27	/2-7300			
					successful, it will be sent at via US Mail	
		d; if tha	<i>mail address first; if that</i> <i>t is unsuccessful, it will</i> i@stc.unm.edu			
using a fax number,	if provided	<b>d; if tha</b> i Istanich	t is unsuccessful, it will			
<i>using a fax number,</i> Email:	if provided	<b>d; if tha</b> i Istanich LINDS/	t is unsuccessful, it will @stc.unm.edu	be sen		
<i>using a fax number,</i> Email: Correspondent Nam	if provided	<i>d; if tha</i> Istanich LINDSA 801 UN	t <i>is unsuccessful, it will</i> @stc.unm.edu AY STANICH	<b>be sen</b> 101	nt via US Mail.	
<i>using a fax number,</i> Email: Correspondent Nam Address Line 1: Address Line 4:	if provided e:	d; if that Istanich LINDSA 801 UN ALBUC	<i>t is unsuccessful, it will</i> l@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE	<b>be sen</b> 101	nt via US Mail.	
using a fax number, Email: Correspondent Nam Address Line 1: Address Line 4:	if provided e:	d; if that Istanich LINDSA 801 UN ALBUQ	t <i>is unsuccessful, it will</i> l@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE QUERQUE, NEW MEXICO	<b>be sen</b> 101	nt via US Mail.	
using a fax number, Email: Correspondent Name Address Line 1: Address Line 4: NAME OF SUBMITTEI SIGNATURE:	if provided e:	d; if that Istanich LINDSA 801 UN ALBUG L	<i>t is unsuccessful, it will</i> I@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE UERQUE, NEW MEXICO	<b>be sen</b> 101	nt via US Mail.	
using a fax number, Email: Correspondent Name Address Line 1: Address Line 4: NAME OF SUBMITTER SIGNATURE: DATE SIGNED:	if provided e:	d; if that Istanich LINDSA 801 UN ALBUG L	t <i>is unsuccessful, it will</i> l@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE PUERQUE, NEW MEXICO INDSAY STANICH _indsay Stanich/	<b>be sen</b> 101	nt via US Mail.	
using a fax number, Email: Correspondent Name Address Line 1: Address Line 4: NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 6 source=2012-068-02 A	if provided e: R: ssignment	d; if that Istanich LINDSA 801 UN ALBUG L /I 0 Inventor	t is unsuccessful, it will i@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE PUERQUE, NEW MEXICO INDSAY STANICH Lindsay Stanich/ 6/26/2014 rs to UNM#page1.tif	<b>be sen</b> 101	nt via US Mail.	
using a fax number, Email: Correspondent Name Address Line 1: Address Line 4: NAME OF SUBMITTEL SIGNATURE: DATE SIGNED: Total Attachments: 6 source=2012-068-02 A source=2012-068-02 A	if provided e: R: ssignment ssignment	d; if that Istanich LINDSA 801 UN ALBUC L // 0 Inventor	t is unsuccessful, it will i@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE UERQUE, NEW MEXICO INDSAY STANICH Lindsay Stanich/ 6/26/2014 rs to UNM#page1.tif rs to UNM#page2.tif	<b>be sen</b> 101	nt via US Mail.	
using a fax number, Email: Correspondent Name Address Line 1: Address Line 4: NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 6 source=2012-068-02 A source=2012-068-02 A	if provided e: R: Assignment Assignment Assignment	d; if that Istanich LINDSA 801 UN ALBUG L /I 0 Inventor Inventor	t is unsuccessful, it will i@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE UERQUE, NEW MEXICO INDSAY STANICH Lindsay Stanich/ 6/26/2014 rs to UNM#page1.tif rs to UNM#page2.tif rs to UNM#page3.tif	<b>be sen</b> 101	nt via US Mail.	
using a fax number, Email: Correspondent Name Address Line 1: Address Line 4: NAME OF SUBMITTEL SIGNATURE: DATE SIGNED: Total Attachments: 6 source=2012-068-02 A source=2012-068-02 A source=2012-068-02 A	if provided e: R: ssignment ssignment ssignment ssignment	d; if that Istanich LINDSA 801 UN ALBUC 1/1 0 Inventor Inventor Inventor	t is unsuccessful, it will i@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE UERQUE, NEW MEXICO INDSAY STANICH Lindsay Stanich/ 6/26/2014 rs to UNM#page1.tif rs to UNM#page3.tif rs to UNM#page4.tif	<b>be sen</b> 101	nt via US Mail.	
using a fax number, Email: Correspondent Name Address Line 1: Address Line 4: NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 6 source=2012-068-02 A source=2012-068-02 A	if provided e: R: ssignment ssignment ssignment ssignment ssignment	d; if that Istanich LINDSA 801 UN ALBUG L 1 L 1 UN Inventor Inventor Inventor Inventor	t is unsuccessful, it will i@stc.unm.edu AY STANICH IIVERSITY BLVD. SUITE UERQUE, NEW MEXICO INDSAY STANICH Lindsay Stanich/ 6/26/2014 rs to UNM#page1.tif rs to UNM#page2.tif rs to UNM#page3.tif rs to UNM#page4.tif rs to UNM#page5.tif	<b>be sen</b> 101	nt via US Mail.	

### INVENTOR ASSIGNMENT TO UNM

ASSIGNMENT from (inventor name): Joseph Costantine whose address is set forth on the signature page hereof (the "Inventor"), to the Regents of the University of New Mexico, an educational institution of the State of New Mexico, whose address is 1 University of New Mexico, MSC05-3440, Albuquerque, NM, 87131 (the "University").

WHEREAS, the Inventor, while employed by or enrolled at the University, conceived and/or reduced to practice one or more inventions which are described both in the disclosure described below and in other materials associated with the disclosure, including materials prepared after the date of this Assignment. The disclosure is identified as:

UNM Docket Ref.	Title
No.	
2012-068	Reconfigurable Filtenna

(both the disclosure and the associated materials are collectively referred to herein as the "Invention Disclosure");

WHEREAS, one or more patent application(s) either have been or may be filed in the future in the United States Patent and Trademark Office and other patent offices covering the invention or inventions described in the Invention Disclosure (collectively, the "Patent Application(s)"). Any such patent application(s) filed as of the date hereof are described below:

Patent App. Serial No. Country	Date of Filing	Title
PCT/US2013/032482	3/15/2013	Systems and Methods for Reconfigurable
		Filtenna

and

WHEREAS, the University is legally entitled to obtain a formal assignment from the Inventor of his/her entire right, title, and interest in and to invention(s) and related technology created by Inventor during his/her employment or enrollment by the University.

NOW, THEREFORE, the Inventor has individually and jointly agreed to assign and transfer and does hereby assign and transfer unto the University, its successors and assigns his/her entire right, title, and interest in and to: (a) the invention(s) described in the Invention Disclosure and/or Patent Application(s); (b) any technical information, know-how, trade secret, process, procedure, composition, biological materials, device, method, formula, protocol, technique, software, design, tradename, trademark, copyright, copyrightable material, drawing or data which is related to the aforesaid invention(s) and/or that is included in the Invention Disclosure, whether or not covered by the Patent Application(s); (c) all rights of the Inventor in the Patent Application(s) including but not limited to all divisions, Letters Patent, reissues, re-examinations, continuations, continuations-in-part, continuing patent applications, substitutions, renewals, extensions filed and all patent(s) issuing thereon in the United States and all foreign countries, including but not limited to the right to apply for Letters Patent, Utility Models, or Inventor Certificates or equivalents in foreign countries in the Inventor's own name and to claim any priority rights for such foreign applications to which such applications are entitled under such countries' domestic laws, international conventions, treaties, or otherwise; and (d) to the extent the University owns the same under its policies and practices, all improvements to the invention(s) described in the Invention Disclosure and/or Patent Application(s) hereafter made or invented by the Inventor (all of the foregoing, (a), (b), (c), and (d) being collectively referred to throughout this Assignment as the "Invention"); and (e). the right to assert claims and bring lawsuits for any violation or infringement of any of the intellectual property rights assigned hereby, including all patents issuing on the Patent Applications.

The Inventor has individually and jointly already agreed and does hereby warrant for himself/herself and heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as lawfully may be deemed necessary by the University, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain and maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all counties; and the Inventor hereby authorizes and requests the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to the University as the assignee of the entire right, title, and interest therein.

THE INVENTOR FURTHER ACKNOWLEDGES AND AGREES AS FOLLOWS:

1. In accordance with the University's policies and practices, all net revenues from the Invention (all income received by the University, or its assignee, from commercialization of the Invention, not including payments for research, development or reimbursement of certain costs), shall be divided as follows: forty percent (40%) equally to the Inventors (unless the Inventors

have otherwise agreed in writing and so notified the University), forty percent (40%) to STC.UNM, and twenty percent (20%) to the University.

- 2. For the purpose of enabling the University, its successors and assigns, without further consideration to obtain, defend and enforce all United States and foreign intellectual property rights in the Invention, the Inventor shall timely communicate all information, execute all documents, testify in all legal proceedings and take all such other actions necessary or desirable to accomplish such purpose.
- 3. The Inventor authorizes the attorney of record for the Patent Application(s) without further consideration to insert in this Assignment where indicated above, or in an Addendum to be attached hereto, the filing date, country where filed, title and serial number of such Patent Application(s) filed hereafter as they become officially known.
- The Inventor authorizes and requests without further consideration all domestic and foreign patent office officials to issue all patents, when granted, to the University, its successors and assigns.
- 5. The Inventor warrants and represents without further consideration that no assignment, sale, agreement or encumbrance has been or will be made or entered into by him/her which would conflict with this assignment.
- 6. THE UNDERSIGNED INVENTOR ACKNOWLEDGES BY HIS/HER SIGNATURE HERETO THAT HE/SHE HAS READ THE FOREGOING, UNDERSTAND ITS CONTENTS AND HAS HAD THE OPPORTUNITY TO CONSULT LEGAL COUNSEL OF HIS/HER CHOOSING CONCERNING HIS/HER RIGHTS AND OBLIGATIONS HEREUNDER.

06/02/2014 Date and the second sec Assignor (Inventor ) Signature: Joseph Costantine Assignor (Inventor) Address: 1418 Modeste Dr. det saturalisation for the second second Tollersbert of 98804 kapue city kinder States SFATE OF CALIFORNYA ss. COUNTY OF Secondill The foregoing instrument was subscribed and acknowledged before me, this day of L orrest by the afore mentioned inventor. Notary Public

My Commission Expires:

Seal:



### INVENTOR ASSIGNMENT TO UNM

ASSIGNMENT from (inventor name): Youssef Antoine Tawk whose address is set forth on the signature page hereof (the "Inventor"), to the Regents of the University of New Mexico, an educational institution of the State of New Mexico, whose address is 1 University of New Mexico, MSC05-3440, Albuquerque, NM, 87131 (the "University").

WHEREAS, the Inventor, while employed by or enrolled at the University, conceived and/or reduced to practice one or more inventions which are described both in the disclosure described below and in other materials associated with the disclosure, including materials prepared after the date of this Assignment. The disclosure is identified as:

	Ref. Title	
NO.		

(both the disclosure and the associated materials are collectively referred to herein as the "Invention Disclosure");

WHEREAS, one or more patent application(s) either have been or may be filed in the future in the United States Patent and Trademark Office and other patent offices covering the invention or inventions described in the Invention Disclosure (collectively, the 'Patent Application(s)"). Any such patent application(s) filed as of the date hereof are described below:

Patent App. Serial No. Count	try Date of Filing	Title
PCT/US2013/032482	3/15/2013	Systems and Methods for Reconfigurable
		Filtenna

#### and

WHEREAS, the University is legally entitled to obtain a formal assignment from the Inventor of his/her entire right, title, and interest in and to invention(s) and related technology created by Inventor during his/her employment or enrollment by the University.

NOW, THEREFORE, the Inventor has individually and jointly agreed to assign and transfer and does hereby assign and transfer unto the University, its successors and assigns his/her entire right, title, and interest in and to: (a) the invention(s) described in the Invention Disclosure and/or Patent Application(s); (b) any technical information, know-how, trade secret, process, procedure, composition, biological materials, device, method, formula, protocol, technique, software, design, tradename, trademark, copyright, copyrightable material, drawing or data which is related to the aforesaid invention(s) and/or that is included in the Invention Disclosure, whether or not covered by the Patent Application(s); (c) all rights of the Inventor in the Patent Application(s) including but not limited to all divisions, Letters Patent, reissues, re-examinations, continuations, continuations-in-part, continuing patent applications, substitutions, renewals, extensions filed and all patent(s) issuing thereon in the United States and all foreign countries, including but not limited to the right to apply for Letters Patent, Utility Models, or Inventor Certificates or equivalents in foreign countries in the Inventor's own name and to claim any priority rights for such foreign applications to which such applications are entitled under such countries' domestic laws, international conventions, treaties, or otherwise; and (d) to the extent the University owns the same under its policies and practices, all improvements to the invention(s) described in the Invention Disclosure and/or Patent Application(s) hereafter made or invented by the Inventor (all of the foregoing, (a), (b), (c), and (d) being collectively referred to throughout this Assignment as the "Invention"); and (e) the right to assert claims and bring lawsuits for any violation or infringement of any of the intellectual property rights assigned hereby, including all patents issuing on the Patent Applications.

The Inventor has individually and jointly already agreed and does hereby warrant for himself/herself and heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as lawfully may be deemed necessary by the University, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain and maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all counties; and the Inventor hereby authorizes and requests the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to the University as the assignee of the entire right, title, and interest therein.

THE INVENTOR FURTHER ACKNOWLEDGES AND AGREES AS FOLLOWS:

1. In accordance with the University's policies and practices, all net revenues from the Invention (all income received by the University, or its assignee, from commercialization of the Invention, not including payments for research, development or reimbursement of certain costs), shall be divided as follows: forty percent (40%) equally to the Inventors (unless the Inventors

have otherwise agreed in writing and so notified the University), forty percent (40%) to STC.UNM, and twenty percent (20%) to the University.

- 2. For the purpose of enabling the University, its successors and assigns, without further consideration to obtain, defend and enforce all United States and foreign intellectual property rights in the Invention, the Inventor shall timely communicate all information, execute all documents, testify in all legal proceedings and take all such other actions necessary or desirable to accomplish such purpose.
- 3. The Inventor authorizes the attorney of record for the Patent Application(s) without further consideration to insert in this Assignment where indicated above, or in an Addendum to be attached hereto, the filing date, country where filed, title and serial number of such Patent Application(s) filed hereafter as they become officially known.
- 4. The Inventor authorizes and requests without further consideration all domestic and foreign patent office officials to issue all patents, when granted, to the University, its successors and assigns.
- 5. The Inventor warrants and represents without further consideration that no assignment, sale, agreement or encumbrance has been or will be made or entered into by him/her which would conflict with this assignment.
- 6. THE UNDERSIGNED INVENTOR ACKNOWLEDGES BY HIS/HER SIGNATURE HERETO THAT HE/SHE HAS READ THE FOREGOING, UNDERSTAND ITS CONTENTS AND HAS HAD THE OPPORTUNITY TO CONSULT LEGAL COUNSEL OF HIS/HER CHOOSING CONCERNING HIS/HER RIGHTS AND OBLIGATIONS HEREUNDER.

Assignor (Inventor) Signature: Youssef Antoine Tawk Assignor (Inventor) Address: 222 Maple Street NE Apt 49 57 Albuquerque, NM 87106 United States

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

The foregoing instrument was subscribed and acknowledged before me, this  $\frac{\partial A}{\partial t}$  day of <u>Naux</u>,  $\frac{\partial CH}{\partial t}$  by the afore mentioned inventor.

\$\$

My Commission Expires:

Seal:

Votary Public



5129/2014

### INVENTOR ASSIGNMENT TO UNM

ASSIGNMENT from (inventor name): Christos G. Christodoulou whose address is set forth on the signature page hereof (the "Inventor"), to the Regents of the University of New Mexico, an educational institution of the State of New Mexico, whose address is 1 University of New Mexico, MSC05-3440, Albuquerque, NM, 87131 (the "University").

WHEREAS, the Inventor, while employed by or enrolled at the University, conceived and/or reduced to practice one or more inventions which are described both in the disclosure described below and in other materials associated with the disclosure, including materials prepared after the date of this Assignment. The disclosure is identified as:

UNM Docket	
No.	
2012-068	Reconfigurable Filtenna

(both the disclosure and the associated materials are collectively referred to herein as the "Invention Disclosure");

WHEREAS, one or more patent application(s) either have been or may be filed in the future in the United States Patent and Trademark Office and other patent offices covering the invention or inventions described in the Invention Disclosure (collectively, the 'Patent Application(s)'). Any such patent application(s) filed as of the date hereof are described below:

	Date of Filing	Title
PCT/US2013/032482	3/15/2013	Systems and Methods for Reconfigurable
		Filtenna

#### and

WHEREAS, the University is legally entitled to obtain a formal assignment from the Inventor of his/her entire right, title, and interest in and to invention(s) and related technology created by Inventor during his/her employment or enrollment by the University.

NOW, THEREFORE, the Inventor has individually and jointly agreed to assign and transfer and does hereby assign and transfer unto the University, its successors and assigns his/her entire right, title, and interest in and to: (a) the invention(s) described in the Invention Disclosure and/or Patent Application(s); (b) any technical information, know-how, trade secret, process, procedure, composition, biological materials, device, method, formula, protocol, technique, software, design, tradename, trademark, copyright, copyrightable material, drawing or data which is related to the aforesaid invention(s) and/or that is included in the Invention Disclosure, whether or not covered by the Patent Application(s); (c) all rights of the Inventor in the Patent Application(s) including but not limited to all divisions, Letters Patent, reissues, re-examinations, continuations, continuations-in-part, continuing patent applications, substitutions, renewals, extensions filed and all patent(s) issuing thereon in the United States and all foreign countries, including but not limited to the right to apply for Letters Patent, Utility Models, or Inventor Certificates or equivalents in foreign countries in the Inventor's own name and to claim any priority rights for such foreign applications to which such applications are entitled under such countries' domestic laws, international conventions, treaties, or otherwise; and (d) to the extent the University owns the same under its policies and practices, all improvements to the invention(s) described in the Invention Disclosure and/or Patent Application(s) hereafter made or invented by the Inventor (all of the foregoing, (a), (b), (c), and (d) being collectively referred to throughout this Assignment as the "Invention"); and (c) the right to assert claims and bring lawsuits for any violation or infringement of any of the intellectual property rights assigned hereby, including all patents issuing on the Patent Applications.

The Inventor has individually and jointly already agreed and does hereby warrant for himself/herself and heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as lawfully may be deemed necessary by the University, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain and maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all counties; and the Inventor hereby authorizes and requests the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to the University as the assignce of the entire right, title, and interest therein.

THE INVENTOR FURTHER ACKNOWLEDGES AND AGREES AS FOLLOWS:

1. In accordance with the University's policies and practices, all net revenues from the Invention (all income received by the University, or its assignee, from commercialization of the Invention, not including payments for research, development or reimbursement of certain costs), shall be divided as follows: forty percent (40%) equally to the Inventors (unless the Inventors

have otherwise agreed in writing and so notified the University), forty percent (40%) to STC.UNM, and twenty percent (20%) to the University.

- 2. For the purpose of enabling the University, its successors and assigns, without further consideration to obtain, defend and enforce all United States and foreign intellectual property rights in the Invention, the Inventor shall timely communicate all information, execute all documents, testify in all legal proceedings and take all such other actions necessary or desirable to accomplish such purpose.
- 3. The Inventor authorizes the attorney of record for the Patent Application(s) without further consideration to insert in this Assignment where indicated above, or in an Addendum to be attached hereto, the filing date, country where filed, title and serial number of such Patent Application(s) filed hereafter as they become officially known.
- 4. The Inventor authorizes and requests without further consideration all domestic and foreign patent office officials to issue all patents, when granted, to the University, its successors and assigns.
- 5. The Inventor warrants and represents without further consideration that no assignment, sale, agreement or encumbrance has been of will be made or entered into by him/her which would conflict with this assignment.
- 6. THE UNDERSIGNED INVENTOR ACKNOWLEDGES BY HIS/HER SIGNATURE HERETO THAT HE/SHE HAS READ THE FOREGOING, UNDERSTAND ITS CONTENTS AND HAS HAD THE OPPORTUNITY TO CONSULT LEGAL COUNSEL OF HIS/HER CHOOSING CONCERNING HIS/HER RIGHTS AND OBLIGATIONS HEREUNDER.

Assignor (Inventor) Signature: Christos G. Christodoulou Assignor (Inventor) Address: <u>8751 Modesto Ave., NE</u> <u>Albuquerque, NM 87122-3701</u> <u>United States</u>

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

The foregoing instrument was subscribed and acknowledged before me, this day of the approximation of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, this day of the subscribed and acknowledged before me, the subscribed and ac

\$8.

My Commission Expires:

Seal:

otary Public



5/29/2014