502078554 09/28/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Karl F Warnick	05/31/2012
Zhenchao Yang	05/31/2012

RECEIVING PARTY DATA

Name:	Brigham Young University	
Street Address:	3760 HBLL	
Internal Address:	Technology Transfer Office, Brigham Young University	
City:	Provo	
State/Country:	UTAH	
Postal Code:	84602	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13488199

CORRESPONDENCE DATA

Fax Number: 8015311929

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 801-994-4646

Email:docket@kunzlerlaw.comCorrespondent Name:Bruce R. NeedhamAddress Line 1:8 East Broadway

Address Line 2: Suite 600

Address Line 4: Salt Lake City, UTAH 84111

ATTORNEY DOCKET NUMBER: 2200.2.12

NAME OF SUBMITTER: Bruce R. Needham

Total Attachments: 3

source=2200.2.12_AssignmentSigned#page1.tif source=2200.2.12_AssignmentSigned#page2.tif source=2200.2.12_AssignmentSigned#page3.tif

PATENT REEL: 029046 FRAME: 0211 OF \$40.00 13488199

ASSIGNMENT

Whereas, the undersigned Inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") in:

- 1. United States Provisional Patent Application Number 61/546,582 entitled: PLANAR ARRAY FEED FOR SATELLITE COMMUNICATIONS, and filed on October 13, 2011 for Karl F. Warnick, et al., docket number 2200.2.1P;
- 2. United States Provisional Patent Application Number 61/519,984 entitled: LOW COST, HIGH EFFICIENCY PASSIVE ARRAY ANTENNA, and filed on June 2, 2011 for Karl F. Warnick, et al., et al., docket number 2200.2.12P1;
- 3. United States Patent Application No. 13/488,199 entitled: PLANAR ARRAY FEED FOR SATELLITE COMMUNICATIONS, and filed on June 4, 2012 for Karl F. Warnick, et al., docket number 2200.2.12; and
- 4. PCT Patent Application No. PCT/US12/40810 entitled: PLANAR ARRAY FEED FOR SATELLITE COMMUNICATIONS, and filed on June 4, 2012 for Karl F. Warnick, et al., docket number 2200.2.12PCT,

Whereas, Brigham Young University, a corporation of Utah having a place of business at 3760 HBLL, Technology Transfer Office, Brigham Young University, Provo, Utah 84602-6844 [hereinafter "BYU"], desires to acquire, and each undersigned Inventor desires to grant to BYU, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto.

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned Inventor ("ASSIGNOR") hereby sells, assigns, and otherwise transfers to BYU (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefore in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, conversions in the case where the above-identified United States patent application is a provisional patent application, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned Inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to BYU, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by BYU, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned Inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in BYU, its successors, legal representatives, and assigns, whenever requested by BYU, its successors, legal representatives, or assigns.

Each undersigned Inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to BYU and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned Inventor also hereby grants BYU, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application

DOCKET NUMBERS: 2200.2.12P, 2200.2.12P1, 2200.2.12 & 2200.2.12PCT

Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of Utah, and any disputes will be resolved in a Utah state court or federal court sited in Utah.

	ned hereby authorize the patent practitioners filing the application serial number and filing date to the		
Assignor:	Karl F. Warnick	Date:	5/31/2012
Assignor:	Zhenchao Yang	Date:	5/31/2012
Assignee:	Brigham Yanno University	Date:	tali-signal Annual property in process plants are a second and a second and a second and a second and a second

DOCKET NUMBERS: 2200.2.12P, 2200.2.12P1, 2200.2.12 & 2200.2.12PCT

Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of Utah, and any disputes will be resolved in a Utah state court or federal court sited in Utah.

The undersigned herein to add the	I hereby authorize the patent practitioner application serial number and filing dat	s filing the U.S. Patent Application referenced to this assignment document.
Assignor:	Karl F. Warnick	Date:
Assignor:	Zhenchao Yang	Date:
Assignee:	Brigham Young University	Date: 31 May 2012

Alan R. Harker
Associate Academic Vice President
For Research and Graduate Studies

Page 2 of 2