

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3128783

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ROSS DAVID MURCH	11/20/2014
VINCENT KIN NANG LAU	11/26/2014
SHENGHONG LI	11/25/2014
RECEIVING PARTY DATA	
Name:	THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY
Street Address:	CLEAR WATER BAY
Internal Address:	KOWLOON
City:	HONG KONG
State/Country:	CHINA
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14549306
CORRESPONDENCE DATA	
Fax Number:	(216)696-8731
<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>	
Phone:	2166968730
Email:	epas@thepatentattorneys.com
Correspondent Name:	AMIN, TUROCY & WATSON, LLP
Address Line 1:	127 PUBLIC SQUARE
Address Line 2:	57TH FLOOR, KEY TOWER
Address Line 4:	CLEVELAND, OHIO 44114
ATTORNEY DOCKET NUMBER:	TTC.PA.0710/HKSTP198USA
NAME OF SUBMITTER:	THOMAS E. WATSON
SIGNATURE:	/Thomas E. Watson/
DATE SIGNED:	12/02/2014
Total Attachments: 5	
source=Assignment [US]14549306(TTC.PA.0710)_Final_20141126#page1.tif	
source=Assignment [US]14549306(TTC.PA.0710)_Final_20141126#page2.tif	
source=Assignment [US]14549306(TTC.PA.0710)_Final_20141126#page3.tif	
source=Assignment [US]14549306(TTC.PA.0710)_Final_20141126#page4.tif	
PATENT	

ASSIGNMENT

(1) Whereas [inventor(s)] has/have invented certain new and useful inventions, hereinafter referred to as "the invention".

In consideration of the sum of one U.S. dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, I [we], the undersigned inventor[s], hereinafter referred to as "ASSIGNOR(S)":

Given Name:	ROSS DAVID MURCH	
Residence:	Clear Water Bay, Kowloon	Citizenship: New Zealand
Mailing Address:	Flat 5A, Tower 11, Senior Staff Quarters, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong	

Given Name:	VINCENT KIN NANG LAU	
Residence:	New Territories, Hong Kong	Citizenship: Hong Kong, China
Mailing Address:	Rm 704, Kwong Ying House, Kwong Ming Court, Tseung Kwan O New Territories, Hong Kong	

Given Name:	SHENGHONG LI	
Residence:	Clear Water Bay, Kowloon	Citizenship: P.R. China
Mailing Address:	Rm 711A, Tower B, University Apartment, The Hong Kong University of Science and Technology Clear Water Bay, Kowloon, Hong Kong	

hereby sell, assign, transfer, and convey unto:

The Hong Kong University of Science and Technology

a Hong Kong educational and research institution, having an address at Clear Water Bay, Kowloon, Hong Kong ("Assignee"), and its successors, assigns and legal representatives, all right, title, and interest that exist today and may exist in the future in and to said invention and application, including but not limited to any and all of the following (collectively, "Patent Rights"):

(a) The U.S. Patent Application ("Application") entitled:

**WEIGHTED SUM DATA RATE MAXIMIZATION USING LINEAR
TRANSCEIVERS IN A FULL-DUPLEX MULTI-USER MIMO SYSTEM**

which was filed as

U.S. Patent Application No. 14/549,306,

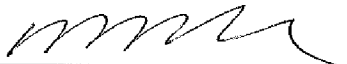
Filed November 20, 2014 and listing the above named persons as inventors;
Date

which has been executed by the undersigned prior hereto or concurrently herewith;

- (b) any and all patents and patent applications (i) to which the Application directly or indirectly claims priority, (ii) for which the Application directly or indirectly forms a basis for priority, and/or (iii) that were co-owned applications that incorporate by reference, or are incorporated by reference into, the Application;
- (c) any and all reissue applications, reexaminations, extensions, continuation applications, continuation-in-part applications, continuing prosecution applications, requests for continued examination, divisional applications, substitute applications, renewal applications, registrations, and any and all other patent applications that have been or shall be filed in the U.S. relating to any item in any of the foregoing categories (a) and (b);
- (d) any and all patents (including, without limitation, reissues, continuations, continuations in part and divisions) issuing from or relating to any of the foregoing categories (a) through (c);
- (e) any and all foreign patents, foreign patent applications, and foreign counterparts relating to any item in any of the foregoing categories (a) through (d), including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances;
- (f) any and all items in any of the foregoing in categories (a) through (e) whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;
- (g) any and all inventions, invention disclosures, improvements, and discoveries described in any item in any of the foregoing categories (a) through (e) and all other rights arising out of such inventions, invention disclosures, improvements, and discoveries;
- (h) any and all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (e) and (g), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;
- (i) any and all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any item in any of the foregoing categories (a) through (e), (g), and (h), including, without limitation, all causes of action and other enforcement rights for (i) damages, (ii) injunctive relief, and (iii) any other remedies of any kind for past, current, and future infringement; and
- (j) any and all rights to collect royalties and other payments under or on account of any item in any of the foregoing categories (a) through (e) and (g) through (i).

- (2) I [we] agree to, at the reasonable request of ASSIGNEE and without demanding any further consideration therefore, do all things necessary, proper, or advisable, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by-country basis, to assist ASSIGNEE in obtaining, perfecting, sustaining, and/or enforcing the Patent Rights. Such assistance will include providing prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, powers of attorney, specifications, declarations or other papers, and other assistance reasonably necessary for filing patent applications, complying with any duty of disclosure, and conducting prosecution, reexamination, reissue, interference or other priority proceedings, opposition proceedings, cancellation proceedings, public use proceedings, infringement or other court actions and the like with respect to the Patent Rights. With prior written approval by ASSIGNEE, ASSIGNEE will pay ASSIGNOR(S)' reasonable costs and expenses.
- (3) I [we] agree that said ASSIGNEE may apply for and receive patent or patents for said Patent Rights in its own name, and hereby authorize the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of ASSIGNEE, as the ASSIGNEE to the entire interest therein.
- (4) I [we] covenant that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others or will be made to others, and that full right to convey the Patent Rights as herein expressed is possessed.
- (5) I [we] hereby authorize and request the attorneys Turocy & Watson, LLP of Cleveland, OH and Seattle, WA to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.
- (6) I [we] agree that the terms and conditions of this Assignment of Patent Rights will inure to the benefit of ASSIGNEE, its successors, assigns, and other legal representatives and will be binding upon the undersigned.

Inventor[s]:

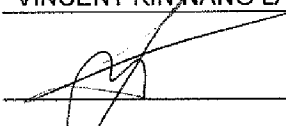
Inventor's Name:	<u>ROSS DAVID MURCH</u>	
Inventor's Signature:		Date <u>2nd NOV 2014</u>

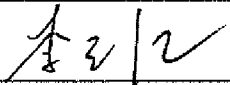
Inventor's Name:	<u>VINCENT KIN NANG LAU</u>	
Inventor's Signature:	_____	Date _____

- (2) I [we] agree to, at the reasonable request of ASSIGNEE and without demanding any further consideration therefore, do all things necessary, proper, or advisable, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by-country basis, to assist ASSIGNEE in obtaining, perfecting, sustaining, and/or enforcing the Patent Rights. Such assistance will include providing prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, powers of attorney, specifications, declarations or other papers, and other assistance reasonably necessary for filing patent applications, complying with any duty of disclosure, and conducting prosecution, reexamination, reissue, interference or other priority proceedings, opposition proceedings, cancellation proceedings, public use proceedings, infringement or other court actions and the like with respect to the Patent Rights. With prior written approval by ASSIGNEE, ASSIGNEE will pay ASSIGNOR(S)' reasonable costs and expenses.
- (3) I [we] agree that said ASSIGNEE may apply for and receive patent or patents for said Patent Rights in its own name, and hereby authorize the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of ASSIGNEE, as the ASSIGNEE to the entire interest therein.
- (4) I [we] covenant that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others or will be made to others, and that full right to convey the Patent Rights as herein expressed is possessed.
- (5) I [we] hereby authorize and request the attorneys Turocy & Watson, LLP of Cleveland, OH and Seattle, WA to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.
- (6) I [we] agree that the terms and conditions of this Assignment of Patent Rights will inure to the benefit of ASSIGNEE, its successors, assigns, and other legal representatives and will be binding upon the undersigned.

Inventor[s]:

Inventor's Name:	<u>ROSS DAVID MURCH</u>
Inventor's Signature:	_____ Date _____

Inventor's Name:	<u>VINCENT KIN NANG LAU</u>
Inventor's Signature:	 _____ Date <u>24 Nov 2014</u>

Inventor's Name: SHENGHONG LI
Inventor's Signature:  Date 25/11/2014