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# PATENT ASSIGNMENT COVER SHEET

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NATURE OF CONVEYANCE:	ASSIGNMENT	

#### **CONVEYING PARTY DATA**

Name	Execution Date
WEN-JUN ZENG	05/19/2018
HING CHEUNG SO	05/24/2018
JIAYI CHEN	05/23/2018
ABDELHAK M. ZOUBIR	05/18/2018

## **RECEIVING PARTY DATA**

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#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15957657

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ATTORNEY DOCKET NUMBER:	CTYU.P0022US/1001013807	
NAME OF SUBMITTER:	JUAN VASQUEZ	
SIGNATURE:	/Juan Vasquez #74723/	
DATE SIGNED:	10/25/2018	

# **Total Attachments: 5**

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> **PATENT** REEL: 047310 FRAME: 0054 505158974

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> PATENT REEL: 047310 FRAME: 0055

#### ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, by Wen-Jun Zeng; Hing Cheung So; Jiayi Chen; and Abdelhak M. Zoubir (hereinafter referred to as Assignors), residing at Room 4D, Floor 5, No. 16 Nam Kok Road, Kowloon City, HONG KONG, CHINA; Unit 22A, 45 Waterloo Road, Kowloon, HONG KONG, CHINA; Room 9g, Building D, Xihai Mingzhu, 1 Taoyuan Road, Nanshan District, Shenzhen, CHINA; and Strabe des 17, Juni 135, 10623 Berlin, GERMANY, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in SYSTEMS AND METHODS FOR SIGNAL PROCESSING USING COORDINATE DESCENT TECHNIQUES FOR UNIT MODULES LEAST SQUARES (UMLS) AND UNIT-MODULUS QUADRATIC PROGRAM (UMQP), set forth in a Patent application for Letters Patent of the United States, already filed on April 19, 2018 as U.S. application No. 15/957,657; and

WHEREAS, City University of Hong Kong, a University organized under and pursuant to the laws of Hong Kong, China having its principal place of business at 4/F, Academic 2, 83 Tat Chee Avenue, Kowloon, HONG KONG, CHINA (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect provisionals, nonprovisionals, divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use

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and benefit of its successors, legal representatives and assigns, to the full end of the term or

terms for which Letters Patent may be granted and/or extended, as fully and entirely as the

same would have been held and enjoyed by Assignors, had this sale and assignment not been

made.

AND for the same consideration, Assignors hereby represent and warrant to

Assignee, its successors, legal representatives and assigns, that, at the time of execution and

delivery of these presents, except for any rights, titles and/or interests that have arisen to

Assignee under law or that have already been transferred to Assignee, Assignors are the sole

and lawful owners of the entire right, title and interest in and to the said inventions and

application for Letters Patent above-mentioned, and that the same are unencumbered and that

Assignors have good and full right and lawful authority to sell and convey the same in the

manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with

Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers

and documents, take all lawful oaths and do all acts necessary or required to be done for the

procurement, maintenance, enforcement and defense of any Letters Patent and applications for

Letters Patent for said inventions, whenever counsel of Assignee, or counsel of its successors,

legal representatives and assigns requests such action.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue

said Letters Patent of the United States to Assignee, as Assignee of said inventions and the

Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal

representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this

Assignment any further identification which may be necessary or desirable in order to comply

with the rules of the United States Patent and Trademark Office for recordation of this

document:

NORTON ROSE FULBRIGHT US LLP

All practitioners at Customer Number 000029053.

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AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date:	19-05-2018	Signature:	Wen-Jun Zeng Wen-Jun Zeng
Date:	24 May 2018	Signature:	Hing Cheung So
Date:		Signature:	Jiayi Chen
Date:		Signature:	Abdelhak M. Zoubir

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date:	Signature: _	Wen-Jun Zeng
Date:	Signature:	Hing Cheung So
Date: May 23, 2018	Signature:	Jayr Chen Jiayi Chen
Date:	Signature:	Abdelhak M. Zoubir

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date:	Signature:	Wen-Jun Zeng
Date:	Signature: _	Hing Cheung So
Date:	Signature:	Jiayi Chen
Date: 18-05-2018	Signature:	Abdelhak M. Zoubir

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**RECORDED: 10/25/2018** 

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