

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Victor H. CHAN</td><td>03/28/2011</td></tr><tr><td>Thomas ZHENG</td><td>04/12/2011</td></tr><tr><td>Yinyin LIU</td><td>03/28/2011</td></tr></tbody></table>	Name	Execution Date	Victor H. CHAN	03/28/2011	Thomas ZHENG	04/12/2011	Yinyin LIU	03/28/2011	
Name	Execution Date								
Victor H. CHAN	03/28/2011								
Thomas ZHENG	04/12/2011								
Yinyin LIU	03/28/2011								
RECEIVING PARTY DATA									
Name:	Qualcomm Incorporated								
Street Address:	5775 Morehouse Drive								
City:	San Diego								
State/Country:	CALIFORNIA								
Postal Code:	92121								
PROPERTY NUMBERS Total: 1									
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>13018409</td></tr></tbody></table>	Property Type	Number	Application Number:	13018409					
Property Type	Number								
Application Number:	13018409								
CORRESPONDENCE DATA									
Fax Number:	(858)658-2502								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
Phone:	858-651-6439								
Email:	tamip@qualcomm.com								
Correspondent Name:	Qualcomm Incorporated								
Address Line 1:	5775 Morehouse Drive								
Address Line 4:	San Diego, CALIFORNIA 92121								
ATTORNEY DOCKET NUMBER:	100440								
NAME OF SUBMITTER:	Tami M Procopio								
Total Attachments: 3 source=100440assign#page1.tif source=100440assign#page2.tif source=100440assign#page3.tif									

CH \$40.00 13018409

## ASSIGNMENT

TO WHOM IT MAY CONCERN:

For the sum of One Dollar and other valuable consideration to me in hand paid, receipt of which is hereby acknowledged, be it known that I,

1. Victor H. CHAN, a citizen of the United States of America, having a mailing address of 5775 Morehouse Drive, San Diego, California; and a resident of San Diego, California;
2. Thomas ZHENG, a citizen of the United States of America, having a mailing address of 5775 Morehouse Drive, San Diego, California; and a resident of San Diego, California; and
3. Yinyin LIU, a citizen of China, having a mailing address of 5775 Morehouse Drive, San Diego, California; and a resident of San Diego, California;

have sold, assigned and transferred and by these presents do sell, assign, transfer and set over unto QUALCOMM Incorporated, a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, its successors, legal representatives, or assigns, the entire right, title and interest in and to a certain invention relating to **"IMAGE RECOGNITION SYSTEM BASED ON CASCADED OVER-COMPLETE DICTIONARIES"** by me devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on **January 31, 2011**, and assigned Serial No. **13/018,409**, including Provisional Application No. 61/300,408, filed on February 1, 2010; and all original and reissue patents granted thereof (in the United States and any foreign county), and all divisions, and continuations thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that I have full right to do so, and agree that I will communicate to said corporation or its representatives all facts known to me respecting said invention, whenever requested, and

### ASSIGNMENT

testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

The Commissioner of Patents and Trademarks is requested to issue the Letters Patent which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

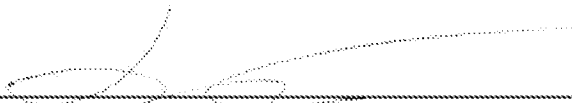
Done at San Diego, California this 28 day of March, 2011.

  
\_\_\_\_\_  
Victor H. CHAN

Done at San Diego, California this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

\_\_\_\_\_  
Thomas ZHENG

Done at San Diego, California this 28 day of March, 2011.

  
\_\_\_\_\_  
Yinyin LIU

**ASSIGNMENT**

testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

The Commissioner of Patents and Trademarks is requested to issue the Letters Patent which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at San Diego, California this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

\_\_\_\_\_  
**Victor H. CHAN**

Done at San Diego, California this 12<sup>th</sup> day of April, 2011.

  
\_\_\_\_\_  
**Thomas ZHENG**

Done at San Diego, California this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

\_\_\_\_\_  
**Yinyin LIU**