Client Code: QCO.414A / 101971U2 RECORDATION FORM COVER SHEET **PATENTS ONLY**

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1. Name of conveying party(ies): (List using letters or numbers for multiple parties) 1) Hojin Lee 2) Fan Zhong 3) Yi Tao Additional name(s) of conveying party(ies) attached? () Yes (X) No 3. Nature of conveyance:	2. Name and address of receiving party(ies): Name: QUALCOMM MEMS Technologies, Inc. Street Address: 5775 Morehouse Drive City: San Diego State: CA ZIP: 92121 Additional name(s) of receiving party(ies) attached? () Yes (X) No
(X) Assignment () Security Agreement () Merger () Change of Name () Other: Execution Date: (List as in section 1 if multiple signatures) 1) March 30, 2011 2) March 23, 2011 3) March 23, 2011	 4. US or PCT Application number(s) or US Patent number(s): (X) Patent Application No.: 13/079,599 Filing Date: April 4, 2011 Additional numbers attached? () Yes (X) No
 Party to whom correspondence concerning document should be mailed: Customer No. 59,747 Address: Knobbe, Martens, Olson & Bear, LLP 2040 Main Street, 14th Floor Irvine, CA 92614 Return Fax: (949) 760-9502 Attorney's Docket No.: QCO.414A / 101971U2 	Total number of applications and patents involved: 1
7. Total fee (37 CFR 1.21(h)): \$40 (X) Authorized to be charged to deposit account	Deposit account number: 11-1410 Please charge this account for any additional fees which may be required, or credit any overpayment to this account.
9. Statement and signature. To the best of my knowledge and belief, the foregoin is a true copy of the original document. Gregory A. Hermanson Name of Person Signing 53,018 Registration No.	g information is true and correct, and any attached copy Howard Land 6, 2011 Date

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PATENT

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Application No.: 13/079,599

Filing Date: April 4, 2011

Knobbe Martens

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PATENT

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ASSIGNMENT

WHEREAS, I, Hojin Lee, a citizen of South Korea, residing at 5-401 Cheongsil APT, Daechi-dong, Kangnam-gu, Seoul, South Korea, 135-281, Fan Zhong, a citizen of the United States, having a mailing address at 2581 Junction Avenue, San Jose, CA 95134 and residing in Fremont, CA; and Yi Tao, a Chinese citizen, having a mailing address at 2581 Junction Avenue, San Jose, CA 95134 and residing in San Jose, CA, have invented certain new and useful improvements in a PIXEL VIA AND METHODS OF FORMING THE SAME, for which I caused to be filed an application for Letters Patent in the United States; and I hereby authorize and request the attorneys of Knobbe, Martens, Olson & Bear, LLP, Customer No. 59,747, to insert here in parentheses (Application Number 13/079,599 , filed April 4, 2011) the filing date and application number of said application when known;

AND WHEREAS, QUALCOMM MEMS Technologies, Inc. (hereinafter "ASSIGNEE"), a Delaware corporation, with its principal place of business at 5775 Morehouse Drive, San Diego, California 92121, U.S.A, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I, the said inventor, do hereby acknowledge that I have sold, assigned, transferred, and set over, and by these presents do hereby sell, assign, transfer, and set over, unto the said ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest throughout the world in, to, and under the said improvements, and the said application and all provisional application(s) to which said Application claims, or is entitled to claim, priority, and all divisions, renewals, and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives, and assigns, in accordance with the terms of this instrument.

AND I DO HEREBY sell, assign, transfer, and convey to the said ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to the said ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of the said Letters Patent before or after issuance.

AND I HEREBY covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

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Application No.: 13/079,599 Filing Date: April 4, 2011	PATENT Client Code: QCO.414A / 101971U2 Page 2.
IN TESTIMONY WHEREOF 20 <u>/</u>].	, I hereunto set my hand and seal this 30th day of March, Hojin Lee
IN TESTIMONY WHEREOFday of, 20	, acknowledged by QUALCOMM MEMS Technologies, Inc. this QUALCOMM MEMS Technologies, Inc.
	Name: Title:

PATENT REEL: 026087 FRAME: 0387

Application No.: 13/079,599 Filing Date: April 4, 2011	Client Code: QCO.414A / 101971U2 Page 3
IN TESTIMONY WHEREOF, I he 2011.	Fan Zhong
IN TESTIMONY WHEREOF, ack	nowledged by QUALCOMM MEMS Technologies, Inc. this
	QUALCOMM MEMS Technologies, Inc.
	Name: Title:

Application No.: 13/079,599 Filing Date: April 4, 2011	PATENT Client Code: QCO.414A / 101971U2 Page 4
IN TESTIMONY WHEREOF, I he	ereunto set my hand and seal this 23 day of March,
	Yi Tao
IN TESTIMONY WHEREOF, ack	mowledged by QUALCOMM MEMS Technologies, Inc. this
	QUALCOMM MEMS Technologies, Inc.
	Name: Title:

10917273 032111

> PATENT REEL: 026087 FRAME: 0389