


Client Code: QMRC.019A / 090353 **RECORDATION FORM COVER SHEET**
PATENTS ONLY

To the Director, U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies):</p> <ol style="list-style-type: none"> 1. Manish Kothari 2. James Randolph Webster 3. Gaurav Sethi 4. Alok Govil 5. Jonathan Charles Griffiths <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party:</p> <p>Name: QUALCOMM MEMS Technologies, Inc. Internal Address: Street Address: 5775 Morehouse Drive City: San Diego State: CA ZIP: 92121</p> <p>Additional name(s) of receiving party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Security Agreement <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Other:</p> <p>Execution Date:</p> <ol style="list-style-type: none"> 1. August 19, 2009 2. July 21, 2009 3. July 2, 2009 4. July 21, 2009 5. July 29, 2009 	<p>4. US or PCT Application number(s) or US Patent number(s):</p> <p>(X) Patent Application No.: 12/559,085 Filing Date: September 14, 2009</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>5. Party to whom correspondence concerning document should be mailed:</p> <p>Customer No. 20,995 Address: Knobbe, Martens, Olson & Bear, LLP 2040 Main Street, 14th Floor Irvine, CA 92614 Return Fax: (949) 760-9502 Attorney's Docket No.: QMRC.019A / 090353</p>	<p>6. Total number of applications and patents involved: 1</p>
<p>7. Total fee (37 CFR 1.21(h)): \$40</p> <p>(X) Authorized to be charged to deposit account</p>	<p>8. Deposit account number: 11-1410</p> <p>Please charge this account for any additional fees which may be required, or credit any overpayment to this account.</p>
<p>9. Statement and signature.</p> <p>To the best of my knowledge and belief, the foregoing information is true and correct, and any attached copy is a true copy of the original document.</p> <p><u>Gregory A. Hermanson</u> Name of Person Signing</p> <p><u></u> Signature</p> <p><u>September 14, 2009</u> Date</p> <p>53,018 Registration No.</p> <p>Total number of pages including cover sheet, attachments and document: 5</p>	

Documents transmitted via Facsimile to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services
Director, U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
Facsimile Number: (571) 273-0140

7796143/bab/091109

700417811

PATENT
REEL: 023230 FRAME: 0983

CH \$40.00 111410 12569086

PATENT

Application No.: Unassigned
Filing Date: Herewith

Attorney Docket: QMRC.019A/090353
Page 1

ASSIGNMENT

WHEREAS, We, Manish Kothari, a U.S. citizen, having a mailing address at 2581 Junction Ave., San Jose, California 95134-1923 and residing at Cupertino, California, James Randolph Webster, a U.S. citizen, having a mailing address at 2581 Junction Ave., San Jose, California 95134-1923 and residing at San Jose, California, Gaurav Sethi, a U.S. citizen, having a mailing address at 2581 Junction Ave., San Jose, California 95134-1923 and residing at Dublin, California; Alok Govil, a citizen of India, having a mailing address at 2581 Junction Ave., San Jose, California 95134-1923 and residing at Santa Clara, California, and Jonathan Charles Griffiths, a U.S. citizen, having a mailing address at 2581 Junction Ave., San Jose, California 95134-1923 and residing at Fremont, California have invented certain new and useful improvements in an INTEGRATED LIGHT EMITTING AND LIGHT DETECTING DEVICE for which we caused to be filed an application for Letters Patent in the United States; and we hereby authorize and request the attorneys of Knobbe, Martens, Olson & Bear, LLP, Customer No. 59,747, to insert here in parentheses (Application Number 12/559,085, filed 09.14.09) 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, desires to acquire the entire right, title, and interest in and to said improvements and said Application;

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.

PATENT

REEL: 023230 FRAME: 0984

PATENT

Application No.: Unassigned
Filing Date: Herewith

Attorney Docket: QMRC.019A/090353
Page 2

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.

PATENT**REEL: 023230 FRAME: 0985**

Application No.: Unassigned
Filing Date: Herewith

PATENT
Attorney Docket: QMRC.019A/090353
Page 3

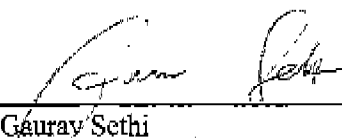
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 19 day of
Aug., 2009


Manish Kothari


IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 21st day of
July, 2009


James Randolph Webster

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 2nd day of
July, 2009


Gaurav Sethi

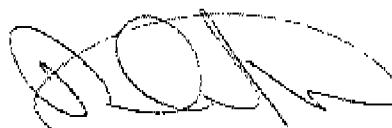
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 24 day of
July, 2009


Alok Govil

Application No.: Unassigned
Filing Date: Herewith

PATENT
Attorney Docket: QMRC.019A/090353
Page 4

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 29 day of
July, 2009



Jonathan Charles Griffiths

IN TESTIMONY WHEREOF, acknowledged by QUALCOMM MEMS Technologies,
Inc. this ____ day of _____, 20__.

QUALCOMM MEMS Technologies, Inc.

Name:
Title:

6930824/bab/040309