Client Code: QCO.280A/091552

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Name of conveying parties: (List using letters or numbers for multiple parties)	Name and address of receiving party(ies):
Ion Bita 4. SuryaPrakash Ganti	Name: QUALCOMM MEMS Technologies, Inc.
2. Sapna Patel 5. Brian W. Arbuckle	Street Address: 5775 Morehouse Drive
3. Clayton Ka Tsun Chan	City: San Diego State: CA
Additional name(s) of conveying party(ies) attached?	ZIP: 92121 Additional name(s) of receiving party(ies) attached?
() Yes (X) No	
	() Yes (X) No
Nature of conveyance: (X) Assignment () Security Agreement () Merger () Change of Name	
() Other: Execution Date: (List as in section 1 if multiple	 US or PCT Application number(s) or US Patent number(s):
signatures) 1. June 9, 2010 2. June 8, 2010 5. June 14, 2010	(X) Patent Application No.: 12/789,415 Filing Date: May 27, 2010
3. June 8, 2010	Additional numbers attached?
	() Yes (X) No
Party to whom correspondence concerning document should be mailed:	Total number of applications and patents involved: 1
Customer No. 59,747	
Address: Knobbe, Martens, Olson & Bear, LLP 2040 Main Street, 14 th Floor Irvine, CA 92614 Return Fax: (949) 760-9502 Attorney's Docket No.: QCO.280A/091552	
7. Total fee (37 CFR 1.21(h)): \$40	8. Deposit account number: 11-1410
(X) Authorized to be charged to deposit account	Please charge this account for any additional fees which may be required, or credit any overpayment to this account.
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To the best of my knowledge and belief, the foregoing is a true copy of the original document.	information is true and correct, and any attached copy
Gregory A. Hermanson Name of Person Signing Signa	Hermanser June 22, 2013 Date
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Application No.: 12/789,415
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ASSIGNMENT

WHEREAS, I, Ion Bita, a Romanian citizen, having a mailing address at 2581 Junction Avenue, San Jose, California 95134, and residing at San Jose, California; Sapna Patel, a US citizen, having a mailing address at 2581 Junction Avenue, San Jose, California 95134, and residing at Fremont, California; Clayton Ka Tsun Chan, a US citizen, having a mailing address at 2581 Junction Avenue, San Jose, California 95134, and residing at Fremont, California; SuryaPrakash Ganti, an Indian citizen, having a mailing address at 2581 Junction Avenue, San Jose, California 95134, and residing at Los Gatos, California; and Brian W. Arbuckle, a US citizen, having a mailing address at 2581 Junction Avenue, San Jose, California 95134, and residing at San Jose, California; have invented certain new and useful improvements in ILLUMINATION DEVICES AND METHODS OF FABRICATION THEREOF 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 12/789,415, filed May 27, 2010) 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.

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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.

20_ <i> o</i> .	IN TESTIMONY WHEREOF, I hereunto set my hand and seal this, day of,
	Ion Bita
20	IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 8 ⁺⁴ day of Jone, 2019
	Sapna Patel
20 <u>/ø</u> .	IN TESTIMONY WHEREOF, I hereunto set my hand and seal this May of June,
	Clayton Ka Tsun Chan
20	IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 9 th day of June,
	ー こうして人 SuryaPrakash Ganti
20	IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _/Y_day of

Brian W. Arbuckle

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IN TESTIMON	WHEREOF, acknowledged by QUALCOMM MEMS Technologies, Inc.
_ day of	, 20 .
	QUALCOMM MEMS Technologies, Inc.
	Composition required the composition of the composi
	Name:
	Title:

9016536-akkr 050710

RECORDED: 06/22/2010