PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Chengjie Zuo	03/25/2011
Chi Shun Lo	02/24/2011
Sanghoon Joo	02/25/2011
Changhan Yun	02/24/2011
Jonghae Kim	02/24/2011

RECEIVING PARTY DATA

Name:	QUALCOMM Incorporated
Street Address:	5775 Morehouse Drive
Internal Address:	Patent Department
City:	San Diego
State/Country:	CALIFORNIA
Postal Code:	92121-1714

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13241356

CORRESPONDENCE DATA

Fax Number: (858)658-2502 Phone: 858-658-5787

Email: Patent.Docketing.US@qualcomm.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

501668429

Correspondent Name: QUALCOMM Incorporated Address Line 1: 5775 Morehouse Drive Address Line 2: Patent Department

Address Line 4: San Diego, CALIFORNIA 92121-1714

ATTORNEY DOCKET NUMBER: 102547

PATENT

REEL: 026954 FRAME: 0811

NAME OF SUBMITTER:	Sam Talpalatsky
Total Attachments: 4 source=120547_ASG_09-23-2011#page1.tif source=120547_ASG_09-23-2011#page2.tif	f
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ASSIGNMENT

TO WHOM IT MAY CONCERN:

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

- Chengjie Zuo, a citizen of China, having a mailing address of 5775 Morehouse Drive,
 San Diego, CA 92121; and a resident of San Diego, California.
- Chi Shun Lo, a citizen of United Kingdom, having a mailing address of 5775 Morehouse
 Drive, San Diego, CA 92121; and a resident of San Diego, California.
- 3. Sanghoon Joo, a citizen of Korea, having a mailing address of 5775 Morehouse Drive, San Diego, CA 92121; and a resident of San Diego, California.
- Changhan Yun, a citizen of United States, having a mailing address of 5775 Morehouse
 Drive, San Diego, CA 92121; and a resident of San Diego, California.
- Jonghae Kim, a citizen of United States, having a mailing address of 5775 Morehouse
 Drive, San Diego, CA 92121; 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 **Piezoelectric Resonator Having Combined Thickness and Width Vibrational Modes** by me devised and the application for United States Patent therefore filed in the United States Patent

ASSIGNMENT

and Trademark Office on Schember 23, 2011, and assigned Serial
No. 13/241, 350. (and I hereby authorize and instruct QUALCOMM Incorporated
to hereafter complete this Assignment by inserting the serial number and date in the space
provided above when known), including, without limitation, all provisional patent applications,
and all original and reissue patents granted thereof, and all divisions, continuations and
continuations-in-part 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 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.
Chengjie Zuo
Done at San Diego, California this day of, 2011.
Chi Shun Lo
Done at Sunnyvale, California this 25th day of February, 2011.
Done at Sunnyvale, California this 25th day of February, 2011. Sanghun fro
Sanghoon Joo

ASSIGNMENT

and Trademark Office on	,	and	assigned	Seria
No, (and I hereby authorize and instr	uct QUA	LCO	VIM Incorp	orated
to hereafter complete this Assignment by inserting the seri-	al numbe	er and	date in the	space
provided above when known), including, without limitation, a	all provis	ional p	oatent applic	ations.
and all original and reissue patents granted thereof, and	all divis	sions,	continuation	ıs and
continuations-in-part thereof, including the subject matter of	any and	all cla	ims which n	nay be
obtained in every such patent, and all foreign rights to said in	vention,	and co	ovenant that	l have
full right to do so, and agree that I will communicate to said co	orporation	ı or its	representati	ves all
facts known to me respecting said invention, whenever re-	quested,	and to	estify in any	egal legal
proceedings, sign all lawful papers, make all rightful oaths and	d general	ly do e	everything po	ossible
to aid said corporation, its successors, assigns and nominees, to	o obtain a	and en	force proper	patent
protection for said invention in all countries.				
The Commissioner of Patents and Trademarks is requested to i	issue the	Letters	Patent whic	h may
be granted for said invention or any part thereof unto said				
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Assignment.				
Done at San Diego, California this day of		, 2	:011.	
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		12	5 W 85 .	
Done at San Diego, California this 24 k day of Februarts		, 2	2011.	
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Ch	i Shun L	0		
Done at San Diego, California this day of		. 2	011.	
				
Sas	nghoon J	00	***************************************	

PATENT Docket No. 102547 Page 3 of 2

ASSIGNMENT

Done at San Diego, California this <u>U</u> day of	February, 2011.	
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	Changhan Yun	-
Done at San Diego, California this <u>W H</u> uday of	Johnwy, 2011.	
А.	1/2/2	
	Jonghae Kim	Ī

PATENT REEL: 026954 FRAME: 0816

RECORDED: 09/23/2011