02-28-2005

FORM PTO-1595 1-31-92

U.S. DEPARTMENT OF COMMERCE

DOCKET NO. 2336-386			ratent a	nd Trademark Office
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereto:				
Name of conveying party(ies):			nd address of receiving party(ies):	$\overline{}$
1. Sang Chul SUL		Name: Samsung Electro-Mechanics Co., Ltd.		113211 U.S. PT0 11/059375
		Street Address:	314 Maetan-3-dong, Youngtong	3211 1/05
		City:	Suwon, Kyungki-do	= -
		State		
3. Nature of conveyance:		Zip:		
⊠ Assignment	☐ Merger	Country:	Republic of Korea	
☐ Security Agreement	☐ Change of Name			
☐ Other				
Execution Date: January 17, 2005		Additional name(s) & address(es) attached? □ Yes 🗷	No
4. Application number(s) or patent number(s):				
If the document is being filed together with a new application, the execution date of the application is: January 17, 2005				
A. Patent Application No(s).		B. Patent No(s).		
Additional numbers attached? Yes No				
 Name and address of party to whom correspondence concerning document should be mailed: 		6. Total number of applications and patents involved: one		
		7. Total fee (37 CFR 3.41) \$40.00		
Name: LOWE HAUPTMAN & BERNER, LLP		☐ Enclosed		
Internal Address:		☐ Authorized to be charged to deposit account ☐ Credit Card payment form enclosed		
		8. Deposit account number: 07-1337		
Street Address: 1700 Diagonal Road, Suite 300		o. Deposit accou	nt number. 07-1357	
City: Alexandria State: VA	Zip: 22314			2
9. Signature.				
9. Signature.	•	3		0000010001059375
Benjamin J. Hauptman, 29,310	S 1/ 18		February 17, 2005	RI
Name of Person, Registration No. Signature Date				0000
Total number of pages including cover sheet, attachment, and document: 4				TIBE
CMB No. 0851-0011 (exp. 4/94)				50, 53
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PATENT REEL: 016293 FRAME: 0201

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned, (4) (1) SUL, Sang Chul____ (5) _____ (2) _____ (6) _____ who have made a certain new and useful invention, hereby sell, assign and transfer unto SAMSUNG ELECTRO-MECHANICS CO., LTD. 314 Maetan-3-dong, Youngtong-ku, Suwon, Kyungki-do, Republic of Korea its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled FILM BULK-ACOUSTIC RESONATOR FILTER HAVING UNBALANCED-BALANCED INPUT/OUTPUT STRUCTURE (a) for which an application for United States Letters Patent was filed on ____, and identified by United States Serial No. or (b) for which an application for United States Letters Patent was executed on and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and any and all extensions. divisions, reissues, substitutes, renewals, continuations, or continuations-inpart thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE:

> PATENT REEL: 016293 FRAME: 0202

AND the undersigned hereby agree to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the dates indicated aside our signatures:

INVENTOR(S)

DATE SIGNED

1) San Cunt

January 17, 2005

Name: SU^{\bigcup} , Sang Chul

RECORDED: 02/17/2005

PATENT REEL: 016293 FRAME: 0203