Joon-soo KIM  Name and Address & receiving part/(les)  SAMSUNG ELECTRONICS CO., LTD.  416 Maetan-dong, Paldal-gu Suwon City, Kyungki-do Republic of Korea  Nature of conveyance:  X	FORM	PTO-1595	REC				U.S. DEPARTMENT OF	COMMERCE
Name of conveying party(ies): Joon-soo KIM  2. Name and Address of receiving party(ies)  SAMSUNG ELECTRONICS CO., LTD. 416 Maetan-dong, Paldal-gu Stwon City, Kyungki-do Republic of Korea  3. Nature of conveyance: X. Assignment Security Agreement Other: Execution Date(s): April 10, 2002  4. Application number(s) or patent number(s): 3 This document is being filed together with a new application: (a) The execution date(s) of the application is/are: April 10, 2002 (b) The title is: AUTOMATIC GAIN CONTROLLER OUTPUTTING CONTROL VALUE VARYING NONLINEARLY, AND A METHOD OF OUTPUTTING A GAIN CONTROL SIGNAL THEREOF OR This document is being filed after filing of the application: (a) Patent Application No(s).  (b) Patent No(s).  STAAS & HALSEY LLP Attention: Michael D. Stein 700 Eleventh Streat, N.W., Suite 500 Washington, D. C. 20001  3. Total number of applications and patents involved:  Total fee (37 CFR 3.41)	2001 S	taas & Halsey LLP						
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Republic of Korea  3. Nature of conveyance:     X Assignment	2.	SAMSUNG ELE	<i>L</i> ECTRONICS (	L	1	<u>`</u>		10/1242
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Application number(s) or patent number(s):    This document is being filed together with a new application:   (a) The execution date(s) of the application is/are: April 10, 2002   (b) The title is: AUTOMATIC GAIN CONTROLER OUTPUTTING CONTROL VALUE VARYING NONLINEARLY, AND A METHOD OF OUTPUTTING A GAIN CONTROL SIGNAL THEREOF   OR	3.	X Assignr Security Other:	ment y Agreement	2002		of Name		
This document is being filed after filing of the application:  (a) Patent Application No(s)/, filed; or  (b) Patent No(s)/, filed; or  (b) Patent No(s)/, filed; or  (c) Patent No(s)/, filed; or  (d) Patent No(s)/, filed; or  (e) Patent No(s)/, filed; or  (filed; or  (f	4.	Application num  This docum  (a) The exe	nber(s) or pate ent is being file ecution date(s e is: AUTOMA NONLINE THEREOF	ent number(s): ed together with a ) of the application TIC GAIN CONTR ARLY, AND A ME	is/are: <u>A</u> l	pril 10, 2002 JTPUTTING C		
STAAS & HALSEY LLP Attention: Michael D. Stein 700 Eleventh Street, N.W., Suite 500 Washington, D.C. 20001  7. Total number of applications and patents involved:1  7. Total fee (37 CFR 3.41)		(a) Patent	ent is being file Application No	o(s)/, f			or	
Total fee (37 CFR 3.41)	5.	STAAS & HALS Attention: Micha 700 Eleventh St	EY LLP ael D. Stein reet, N.W., Su					ed:
Authorized to be charged to deposit account.  Deposit Account No.: 19-3935 (Any underpayment is authorized to be charged to this Deposit Account) (Attach duplicate copy of this page if paying by deposit account)  Statement and signature.  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.  Michael D. Stein, Reg. No. 37,240 Name of Person Signing  Total number of pages including cover sheet: 2  Total number of pages including cover sheet: 2  Total number of pages including cover sheet: 2	<b>3</b> .	Total number of	applications a	and patents involve	ed: <u>1</u>			
(Attach duplicate copy of this page if paying by deposit account)  3. Statement and signature.  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.  Michael D. Stein, Reg. No. 37,240 Name of Person Signing  Total number of pages including cover sheet: 2  Total number of pages including cover sheet: 2  Total number of pages including cover sheet: 2	7.	X Enclose	ed			ent)		
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.  Michael D. Stein, Reg. No. 37,240 Name of Person Signing  Total number of pages including cover sheet: 2	З.						harged to this Dep	osit Account)
Name of Person Signing Signature Date  Total number of pages including cover sheet: 2  DO NOT USE THIS SPACE  719/2002 JBALINAN 00000028 10124261	9.	To the best of m	ny knowledge		gojng infor	rmation is true a	and correct and an	y attached
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PATENT REEL: 012824 FRAME: 0414

## U.S. ASSIGNMENT

S&H 1/00

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by (Insert Name(s) & Address(es) of ASSIGNEE(S)) SAMSUNG ELECTRONICS CO., LTD. 416, Maetan-dong, Paldal-gu, Suwon-city, Kyungki-do, Korea (hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled (Title of Invention) AUTOMATIC GAIN CONTROLLER OUTPUTTING CONTROL VALUE VARYING NONLINEARLY, AND A METHOD OF OUTPUTTING A GAIN CONTROL SIGNAL THEREOF relating to International Patent Application PCT/JP / and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was: (Insert date of execution of application, if not concurrent) (a) executed on \_\_\_\_\_; (b) filed on , Any registered attorney of STAAS & HALSEY LLP, 700 Eleventh Street, N.W., Washington, D.C. 20001 (202/434-1500) is hereby authorized to Serial No. / ; insert in (b) the specified data, when known. and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)"). The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence. IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s). (Typed Name & Signature of Witness(es)) (Typed Name & Signature of Inventor(s)) April 10, 2002 Ji-young JANG

> PATENT REEL: 012824 FRAME: 0415