11/02/2005 01 FC:8021

Mail Stop: **Assignment Recordation Services** Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

11-03-2005 103113295

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

Attorney Docket No.

125800

	Please record the attached ori	ginal document or copy thereof.				
1.	 A. Name of conveying parties: [1] Songcheol HONG [2] Dong Ho LEE [3] Kyung-Ai LEE B. Additional name(s) of conveying party(ies) attached? ☐ Yes ☐ No 	2. A. Name and address of receiving party: KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY 373-1, GUSEONG-DONG, YUSEONG-GU DAEJEON 305-701 KOREA				
3.	A. Nature of conveyance: Assignment	B. Additional name(s) & address(es) attached? □Yes ☑ No				
4.	This document is being filed together with a new application No.(s)	B. Patent No.(s)				
	Additional numbers attached? ☐ Yes ☒ No C. Title of Application: DIFFERENTIAL AMPLIFIER AND METHOD FOR GENERATING COMPUTER SIMULATION MODEL THEREOF					
5.	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1				
	Name:James A. Oliff	7. A. Total fee (37 CFR 3.41)\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
	Address: OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, VA 22320	Credit any overpayment or charge any underpayment to deposit account number 15-0461.				
9.	Statement and signature.					
COOP	James A. Oliff, Registration No. 27,075 Thomas J. Pardini, Registration No. 30,411	Date: October 28, 2005 ncluding cover sheet, attachments, and document: 2				
	40.00 ND					

ASSIGNMENT

(5)

(1) Songcheol, HONG

RECORDED: 10/28/2005

	Insert	(2)	Dong Ho, LEE	(6)	
	Name(s) of Inventor(s)	(3)	Kyung-Ai, LEE	(7)	
		(4)		(8)	
			of the undersigned, each undersign	foliar (\$1.00) and other good and valuable coned agrees to assign, and hereby does assign,	
(9)	Insert Name of Assignee	(9)	Korea Advanced Institu	ate of Science and Technology	
(10)	Insert Address of Assignee	(10)		useong-gu, Daejeon 305-701, K	Corea
		the ent invent division	ire right, title and interest for the Union, and in all applications for paternal, continuation, substitute, and re	nd Assignee's heirs, successors, assigns and leganited States of America as defined in 35 U.S at including any and all provisional, non-proissue application(s), and all Letters Patent, et may be granted on the invention known as	.C. §100, in the visional, xtensions,
(11)	Insert	(11)	DIFFERENTIAL AMPL	IFIER AND METHOD FOR G	<u>ENERATING</u>
	Identification such as Title, Case		COMPUTER SIMULA	TION MODEL THEREOF	
	Number, or Foreign Application Number	(Attor	ney Docket No. 125800)
			ich the undersigned has (have) exec n date herewith or	cuted an application for patent in the United	
(12)	Insert Date of Signing of Application	(12)	on All: October 1.	2005	
(13)	Alternative	(13)	U.S. application Serial Number		
	Identification for filed applications	filed	October 28, 2005		
applica	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or di	n, and an mee may s to exec vision the n obtain	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connecti- tereof, or any patent or reissue appli- ing evidence and going forward with	on with any application and any continuing, to execute separate assignments in connect on with any interference which may be declaration based thereon, for the invention, and h such interference.	ion with such ared concerning to cooperate with
applica any app the Ass claims reexam resultir entire i assignm identifi	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible if 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree ination a grant of a valid Unit 5) Each undersigned author g from said application(s) to interest herein assigned, and the tent is binding on him and him to Each undersigned herein and the Each undersigned herein	n, and an mee mays s to exec vision the n obtain s to exec onal Con s to perfeted State rizes and that he has s heirs, s	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective control of the co	on to execute separate assignments in connection with any interference which may be declared in the same of the invention, and in such interference. If the same interference is the invention is and in the same interference. If the same is a same interference. If the same is a same i	ared concerning to cooperate with connection with by reissue or to convey the agrees that this
applica any app the Ass claims reexam resultir entire i assignm identifi	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible in 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree in a grant of a valid Unity 5) Each undersigned author g from said application(s) to the test herein assigned, and the interest herein assigned, and the continuation of the interest herein assigned here beation that may be necessary tion of this document. In witness whereof, execu	n, and an mee mays s to exec evision th n obtain s to exec mal Con s to perfet ted State rizes and the said he said he said s heirs, s y grants or desira	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective control of the co	on to execute separate assignments in connection with any interference which may be declaration based thereon, for the invention, and his such interference. The erform any act which may be necessary in conforming the necessary to obtain, maintain or confirming the necessary to obtain the necessary the necessary to obtain the necessary to o	ared concerning to cooperate with connection with ey reissue or e United States to convey the agrees that this further c Office for
applica any app the Ass claims reexam resultir entire i assignm identifi	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible is 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree ination a grant of a valid Unit 5) Each undersigned author grown said application(s) to interest herein assigned, and the time to binding on him and him 6) Each undersigned hereboation that may be necessary tion of this document.	n, and an mee mays to exec evision th n obtain s to exec mal Con s to perfeted State rizes and the said the said the said s heirs, s y grants or desira	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective of the connective record, or any patent or reissue appliance and going forward with ute all papers and documents and povention for Protection of Industrial form all affirmative acts which may be spatent to the Assignee. It requests the Commissioner of Patents and executed, and will not execute uscessors, assigns and legal represented firm of OLIFF & BERRIDGE, PLable in order to comply with the rule of the undersigned on the date(s) opposition.	on to execute separate assignments in connection with any interference which may be declaration based thereon, for the invention, and his such interference. The erform any act which may be necessary in conforming the necessary to obtain, maintain or confirming the necessary to obtain the necessary the necessary to obtain the necessary to o	ared concerning to cooperate with connection with ey reissue or e United States to convey the agrees that this further c Office for
applica any app the Ass claims reexam resultir entire i assignr identifi records	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible if 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree ination a grant of a valid Unit 5) Each undersigned author g from said application(s) to interest herein assigned, and the interest herein assigned, and the interest herein assigned herebeation that may be necessary tion of this document. In witness whereof, executive in the interest herein assigned herebeation that may be necessary the interest herein assigned herebeation of this document.	n, and an mee mays to exec evision th n obtain s to exec mal Con s to perfeted State rizes and the said the said the said s heirs, s y grants or desira	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective control of the papers and documents and provention for Protection of Industrial orm all affirmative acts which may be spatent to the Assignee. I requests the Commissioner of Pater Assignee, as Assignee of the entire is not executed, and will not executed the firm of OLIFF & BERRINGE, PL able in order to comply with the rule of the undersigned on the date(s) opposition. Name of Inventor	on with any interference which may be declared in the based thereon, for the invention, and the such interference. From any act which may be necessary in corproperty or similar agreements. The necessary to obtain, maintain or confirm the state to issue any and all Letters Patents of the interest, and covenants that he has full right the state of the confirm the state of the sta	ared concerning to cooperate with connection with to reissue or to United States to convey the tagrees that this further to Office for (SEAL)
applica any apy the Ass claims reexam resultir entire i assignm identifi records	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible in 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree in ation a grant of a valid Unit 5) Each undersigned author grows and application(s) to interest herein assigned, and the interest herein assigned here is binding on him and him to be Each undersigned here is cation that may be necessary tion of this document. In witness whereof, executions and patent is discounted to the interest herein assigned here is cation that may be necessary the interest herein assigned here is cation that may be necessary the interest herein assigned herein that may be necessary the interest herein assigned herein that may be necessary the interest herein assigned herein that may be necessary the interest herein assigned herein that may be necessary the interest herein as in the interes	n, and an mee mays to executivision the nobtain so to executive for the said that he has a heirs, sy grants or desired by the said the said the said the said that he has a heirs, sy grants or desired by the said the said the said that he has a heirs, sy grants or desired by the said that he has a heirs, sy grants or desired by the said that he has a heirs, so the said that he has a heirs, sy grants or desired by the said that he has a heirs, so the said that he has a heir he	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective control of the papers and documents and provention for Protection of Industrial orm all affirmative acts which may be spatent to the Assignee. I requests the Commissioner of Pater Assignee, as Assignee of the entire is not executed, and will not executed the firm of OLIFF & BERRINGE, PL able in order to comply with the rule of the undersigned on the date(s) opposition. Name of Inventor	on with any interference which may be declared in the same of the invention, and the such interference. The property or similar agreements. The necessary to obtain, maintain or confirm the interest, and covenants that he has full right the interest, and covenants that he has full right the interest. The power to insert on this assignment any es of the United States Patent and Trademark of the undersigned name(s). Songcheol, HONG Dong Ho, LEE Kyung-Ai, LEE	ared concerning to cooperate with connection with to reissue or to United States to convey the agrees that this further to Office for (SEAL) (SEAL)
applica any app the Ass claims reexam resultir entire i assignr identifi records Date Date	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible is 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree in ation a grant of a valid Unit 5) Each undersigned author grown said application(s) to interest herein assigned, and the interest is binding on him and him 6) Each undersigned herebeation that may be necessary tion of this document. In witness whereof, executive Colorer 1, 2	n, and an mee mays to execution the nobtain so to execute the said that he has a heirs, sy grants or desired by the said the said the said the said that he has a heirs, sy grants or desired by the said the said the said the said that he has a heirs, so y grants or desired by the said the said that he has a heirs, so y grants or desired by the said that he has a heir said that he has a he	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective control of the papers of the papers and documents and powention for Protection of Industrial orm all affirmative acts which may be patent to the Assignee. I requests the Commissioner of Pater Assignee, as Assignee of the entire as not executed, and will not execut uccessors, assigns and legal represente firm of OLIFF & BERRIDGE, PLable in order to comply with the rule of the undersigned on the date(s) opposition of the patents of the same of the s	on with any interference which may be declared in the such interference. The such interference which may be necessary in confirm any act which may be necessary in confirm the necessary to obtain, maintain or confirm the interest, and covenants that he has full right e, any agreements in conflict herewith, and a sentatives. The power to insert on this assignment any es of the United States Patent and Trademark the undersigned name(s). Songcheol, HONG Dong Ho, LEE Kyung-Ai, LEE	ion with such ared concerning to cooperate with connection with or reissue or to United States to convey the agrees that this further to Office for (SEAL) (SEAL) (SEAL)
applica any app the Ass claims reexam resultir entire i assignr identifi records Date Date	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible in 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree in a grant of a valid Unity 5) Each undersigned author grown said application(s) to the test herein assigned, and the interest herein assigned, and the first is binding on him and him and the cation that may be necessary tion of this document. In witness whereof, execution is a compared to the compared to th	n, and an mee mays to exect vision the nobtain of the said that he has a heirs, s y grants or desired by the said the sa	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective elected, or any patent or reissue appliance and going forward with ute all papers and documents and povention for Protection of Industrial ormall affirmative acts which may be spatent to the Assignee. I requests the Commissioner of Pater Assignee, as Assignee of the entire as not executed, and will not execute uccessors, assigns and legal represents the firm of OLIFF & BERRIDGE, PLable in order to comply with the rule are undersigned on the date(s) opposite undersigned on the date(s) opposite undersigned on the date(s) opposite undersigned on the date(s) make of Inventor Name of Inventor Name of Inventor Name of Inventor	on with any interference which may be declared in the based thereon, for the invention, and the such interference. Berform any act which may be necessary in corproperty or similar agreements. Be necessary to obtain, maintain or confirm the interest, and covenants that he has full right the interest, and covenants that he has full right the entatives. Confirm the undersigned name(s). Songcheol, HONG Dong Ho, LEE Kyung-Ai, LEE	ion with such ared concerning to cooperate with connection with by reissue or to United States to convey the agrees that this further to Office for (SEAL) (SEAL) (SEAL) (SEAL)
applica any app the Ass claims reexam resultir entire i assignr identifi records Date Date Date Date Date Date	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible ion provisions of the Internation 4) Each undersigned agree in a grant of a valid Unit 5) Each undersigned author grown said application(s) to interest herein assigned, and the interest herein assigned, and the interest herein assigned herebe cation that may be necessary tion of this document. In witness whereof, executive Cocholer 1, 2 October 1, 2	n, and an mee mays to exect vision the nobtain sto exect on all Constituted State rizes and the said that he has a heirs, sy grants or desire ted by the said that he has a heirs, so result the said that he has a heirs, so result the said that he has a heirs, so result that he has a heirs, so result that he has a heirs, so result that he has a heir so result that	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective content of the papers of the papers and documents and powention for Protection of Industrial orm all affirmative acts which may be patent to the Assignee. I requests the Commissioner of Pater Assignee, as Assignee of the entire as not executed, and will not execute uccessors, assigns and legal representable in order to comply with the rule of the undersigned on the date(s) opposition of the patents of the entire as not executed. Name of Inventor	on with any interference which may be declared in the such interference. In the such interference which may be necessary in conform any act which may be necessary in conform any act which may be necessary in conform the necessary to obtain, maintain or confirm the interest, and covenants that he has full right e, any agreements in conflict herewith, and a sentatives. In the power to insert on this assignment any es of the United States Patent and Trademark posite the undersigned name(s). Songcheol, HONG Dong Ho, LEE Kyung-Ai, LEE	ion with such ared concerning to cooperate with connection with our reissue or to United States to convey the agrees that this further to Office for (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL)
applica any app the Ass claims reexam resultir entire i assignm identifi records Date Date Date Date Date Date Date	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible in 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree in a grant of a valid Unity 5) Each undersigned author go from said application(s) to the test therein assigned, and the interest herein assigned, and the interest herein assigned here is binding on him and him 6) Each undersigned here is cation that may be necessary the interest herein that in the interest herein assigned in the interest herein assigned, and the interest herein assigned, and the interest herein assigned here is binding on him and him 6) Each undersigned here is cation that may be necessary the interest whereof, execution of this document. In witness whereof, execution is a supplied to the interest in the	n, and an mee mays to exect vision the nobtain of the state of the said that he had a heirs, by grants or desired by the said the	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective cereof, or any patent or reissue appliance of any patent or reissue appliance and going forward with ute all papers and documents and powention for Protection of Industrial or all affirmative acts which may be spatent to the Assignee. I requests the Commissioner of Paten Assignee, as Assignee of the entire is not executed, and will not execute uccessors, assigns and legal represents the firm of OLIFF & BERRIDGE, PLable in order to comply with the rule are undersigned on the date(s) opposite undersigned on	on with any interference which may be declaration based thereon, for the invention, and he such interference. Property or similar agreements. The necessary to obtain, maintain or confirm the interest, and covenants that he has full right to, any agreements in conflict herewith, and sentatives. The power to insert on this assignment any es of the United States Patent and Trademark the undersigned name(s). Songcheol, HONG Dong Ho, LEE Kyung-Ai, LEE	ion with such ared concerning to cooperate with connection with by reissue or to United States to convey the agrees that this further to Office for (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL)
applica any app the Ass claims reexam resultir entire i assignm identifi records Date Date Date Date Date Date Date Dat	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible if 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree in a grant of a valid Unity 5) Each undersigned author grown said application(s) to the test herein assigned, and the test is binding on him and him 6) Each undersigned herebeation that may be necessary tion of this document. In witness whereof, execution of the control of the company of the compa	n, and an mee mays to execution the nobtain of the said that he has a heirs, sy grants or desired by the said t	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective elector, or any patent or reissue appliance and going forward with ute all papers and documents and povention for Protection of Industrial orm all affirmative acts which may be a patent to the Assignee. I requests the Commissioner of Patents and executed, and will not execute uccessors, assigns and legal represents from of OLIFF & BERRIDGE, PLable in order to comply with the rule are undersigned on the date(s) opposite undersigned on t	on with any interference which may be declared in the such interference. The such interference which may be necessary in confirm any act which may be necessary in confirm the necessary to obtain, maintain or confirm the interest, and covenants that he has full right e, any agreements in conflict herewith, and a sentatives. The power to insert on this assignment any es of the United States Patent and Trademark the undersigned name(s). Songcheol, HONG Dong Ho, LEE Kyung-Ai, LEE	ion with such ared concerning to cooperate with connection with or reissue or to United States to convey the agrees that this further to Office for (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL)
applica any app the Ass claims reexam resultir entire i assignm identifi records Date Date Date Date Date Date Date Dat	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible in 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree in ation a grant of a valid Unit 5) Each undersigned author grown said application(s) to a terest herein assigned, and the interest herein assigned, and the interest herein assigned herebecation that may be necessary tion of this document. In witness whereof, executive to the interest herein assigned in the interest herein assigned herebecation that may be necessary to of this document. In witness whereof, executive to the interest herein assigned in the interest	and an	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connective cereof, or any patent or reissue appliance of any patent or reissue appliance and going forward with ute all papers and documents and powention for Protection of Industrial orm all affirmative acts which may be spatent to the Assignee. I requests the Commissioner of Paten Assignee, as Assignee of the entire so not executed, and will not execute uccessors, assigns and legal represents the firm of OLIFF & BERRIDGE, PLable in order to comply with the rule are undersigned on the date(s) opposite undersigned on	on with any interference which may be declared in the such interference. The such interference which may be necessary in confirm any act which may be necessary in confirm the necessary to obtain, maintain or confirm the interest, and covenants that he has full right e, any agreements in conflict herewith, and a sentatives. The power to insert on this assignment any es of the United States Patent and Trademark the undersigned name(s). Songcheol, HONG Dong Ho, LEE Kyung-Ai, LEE	ion with such ared concerning to cooperate with connection with or reissue or to United States to convey the agrees that this further to Office for (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL)
applica any app the Ass claims reexam resultir entire i assignm identifi records Date Date Date Date Date Date Date Dat	applications for the invention ions and patents as the Assig 2) Each undersigned agree lication or continuation or dignee in every way possible if 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agree in a grant of a valid Unity 5) Each undersigned author grown said application(s) to the test herein assigned, and the test is binding on him and him 6) Each undersigned herebeation that may be necessary tion of this document. In witness whereof, execution of the control of the company of the compa	a, and an mee mays to execution the nobtain of the said that he has a heirs, sy grants or desired by the said t	y patent(s) issuing thereon, and also deem necessary. ute all papers necessary in connectivereof, or any patent or reissue applications of any patent or reissue application of any patent or reissue application of protection of Industrial ormall affirmative acts which may be spatent to the Assignee. I requests the Commissioner of Patents and executed, and will not execute as not executed, and will not execute uccessors, assigns and legal represents firm of OLIFF & BERRIDGE, PLable in order to comply with the rule are undersigned on the date(s) opposite undersigne	on with any interference which may be declared in the such interference. The such interference which may be necessary in confirm any act which may be necessary in confirm the necessary to obtain, maintain or confirm the interest, and covenants that he has full right e, any agreements in conflict herewith, and a sentatives. The power to insert on this assignment any es of the United States Patent and Trademark the undersigned name(s). Songcheol, HONG Dong Ho, LEE Kyung-Ai, LEE	ion with such ared concerning to cooperate with connection with or reissue or to United States to convey the agrees that this further to Office for (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL) (SEAL)

PATENT REEL: 017157 FRAME: 0609